ARCHITECTURE

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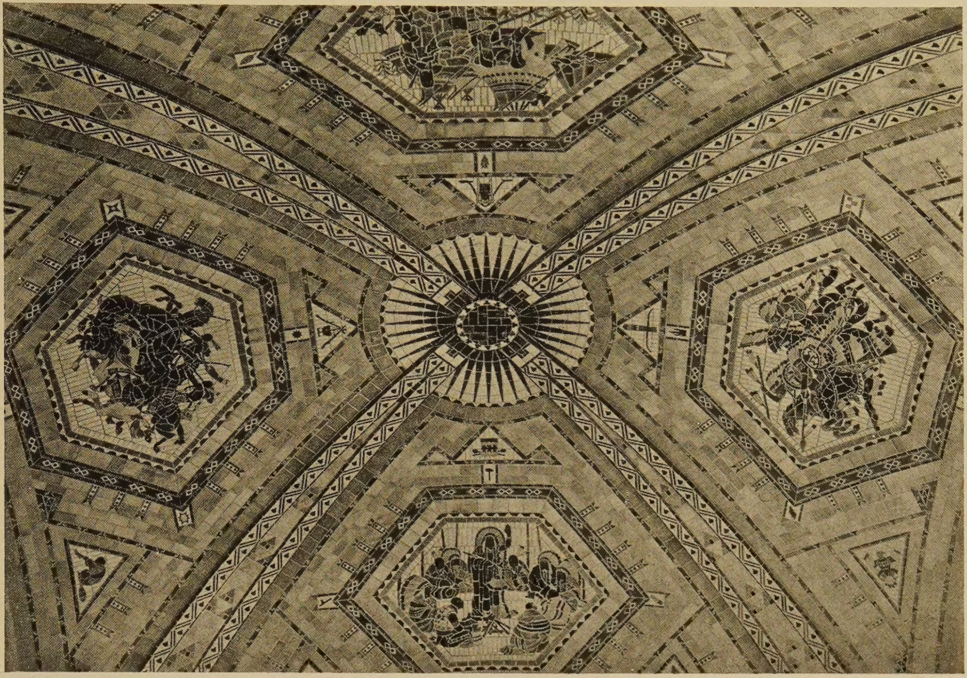


Ceiling of the Senate Chamber

Hildreth Meière's Work for Nebraska

By *Hartley Burr Alexander*

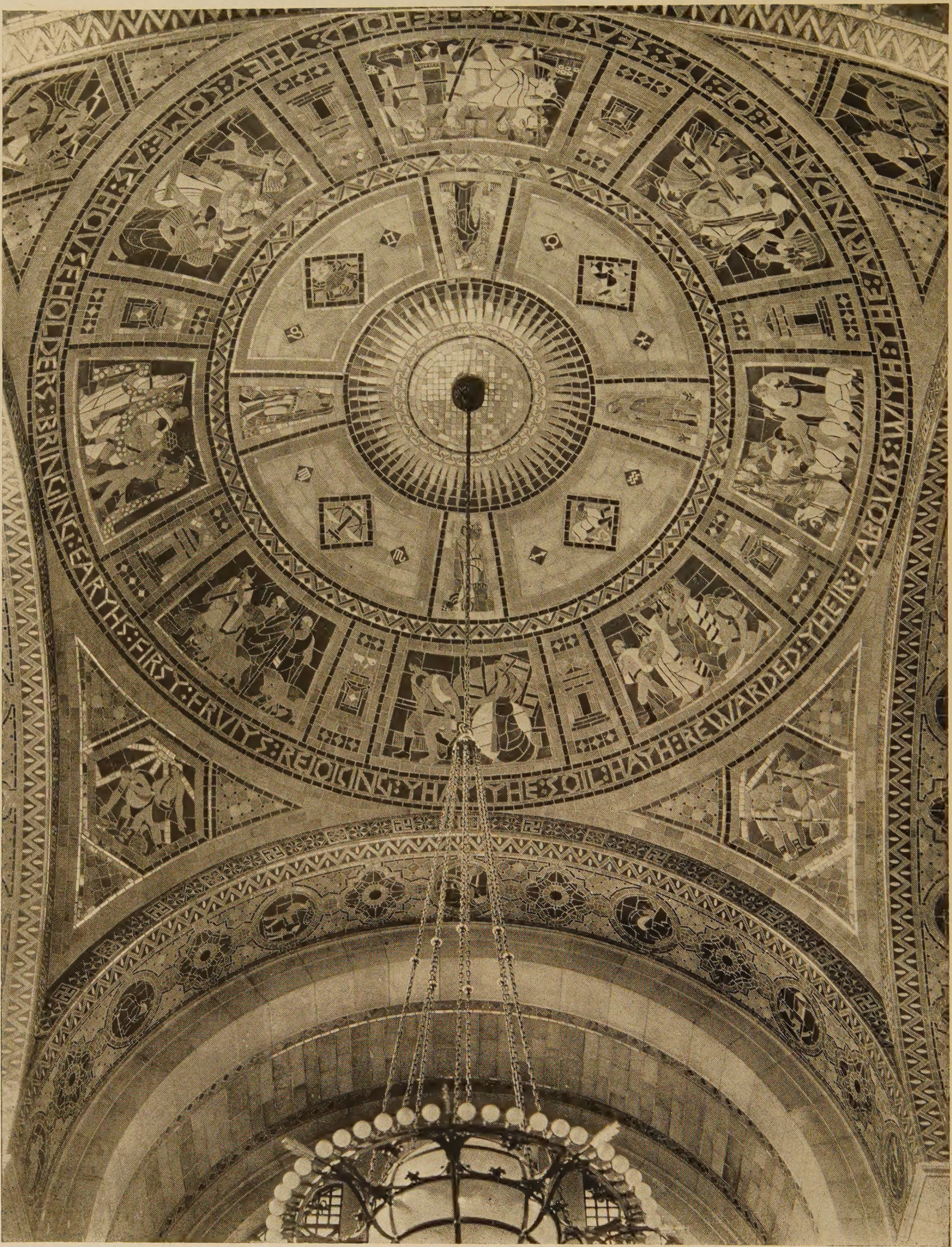
BY one of those chances which befall travellers, we had met in the Brufani at Perugia—the artist just from Spain, I from Rome—and our meeting was the prelude for days together in Florence and the hill cities. It was in Sienna that we were standing on the great floor of the cathedral, patterned by Paciarelli and adorned with the visions, pagan and churchly, of the exuberant creators of Sienna's lasting glories.

"Oh, if I could but do such a thing for Nebraska!"

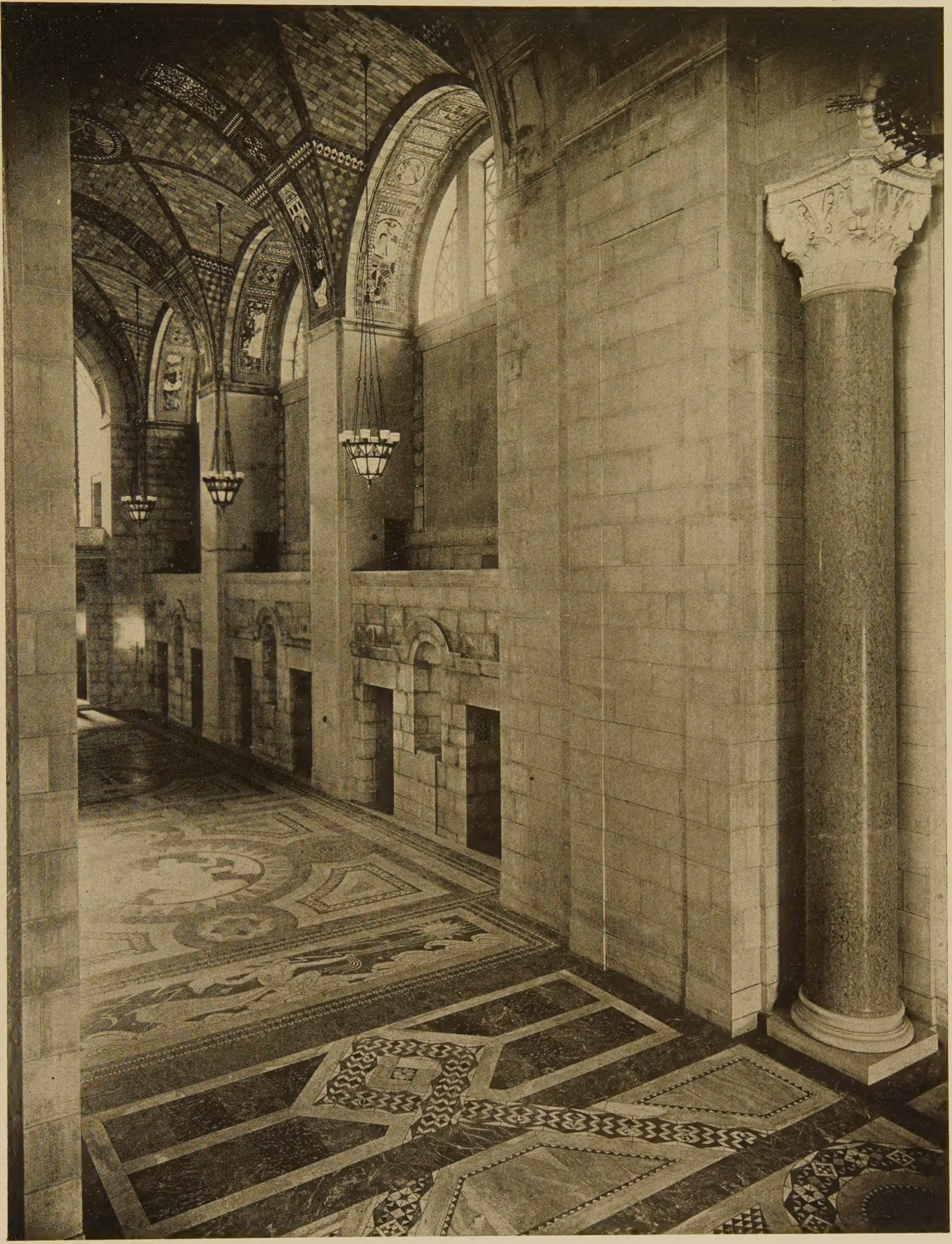
This from the artist, and I, equally impressed:

"You shall! The great floor is just the place, and I know the theme, the Procession of Life, the old life of the soil! It is epic."

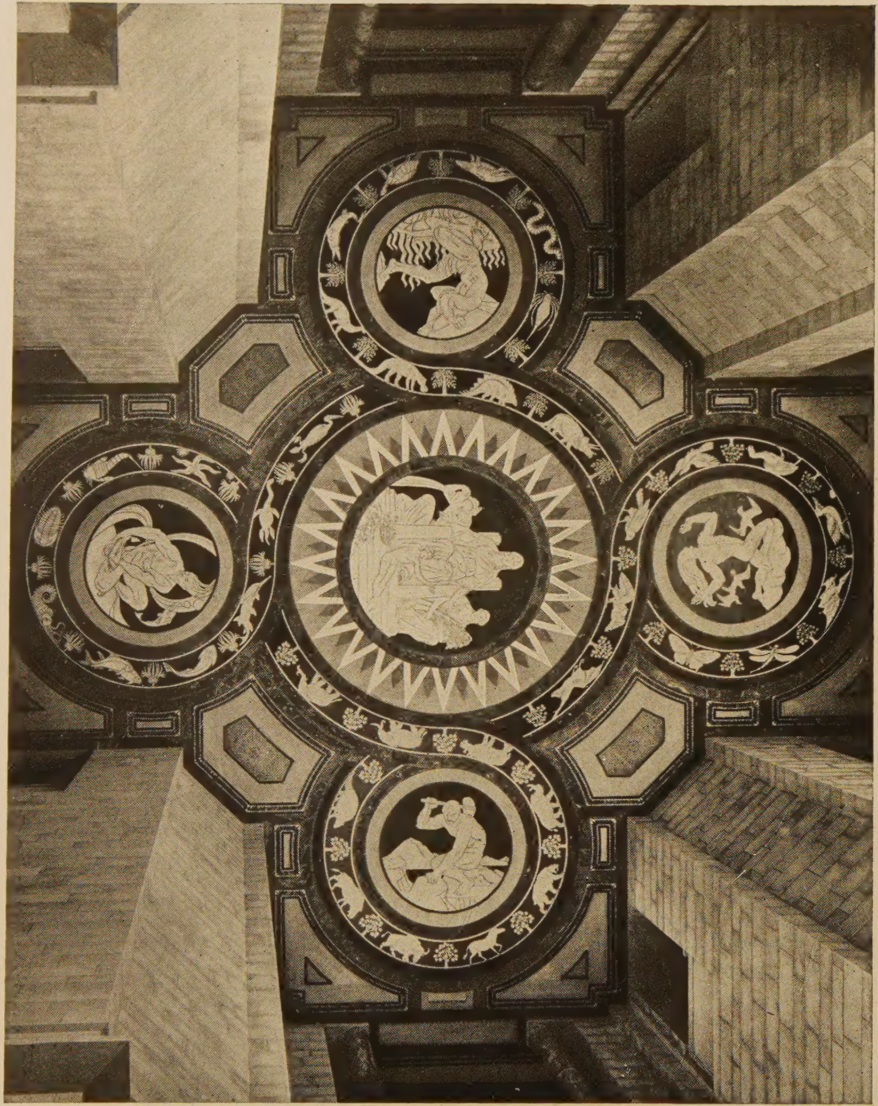
Later, in Paris, it was all worked out: down the foyer, first, Cosmic Energy, electric, driving through space and shaping stars and suns; next, the Divider of the Rocks, the sylph that is the life of the mineral world; central, a Flora magically summoning vegetation from its prisons; beyond this, her sister nymph, Fauna perhaps, the fosterer of animal life; and at the threshold which parts the foyer from the great rotunda of the Capitol the splendid Eros, who typifies Vital Energy, with seed and nuptial-winged insects imaging his gift. The crown of the design is the rotunda floor. In pattern it is an immense guilloche with four nodes. There are thus five major panels, tondi rather, for they are round, carrying forward the theme of creation. Central is the great Earth Mother—Terra Magna, Mater Deorum—throned and crowned, the most ancient of man's deities; while in each of the adjoining circles is a Genius of the Element—of Water, and then of Fire, of Air, of Earth. Following the guilloche which winds about all these is the Procession, each segment carrying the life forms appropriate to it—the ancient marine forms of the seas that once were Ne-


HOLDERS BRINGING EARTHS FIRST FRUITS REJOICING THAT THE SOIL HATH REWARDED THEIR LABOURS

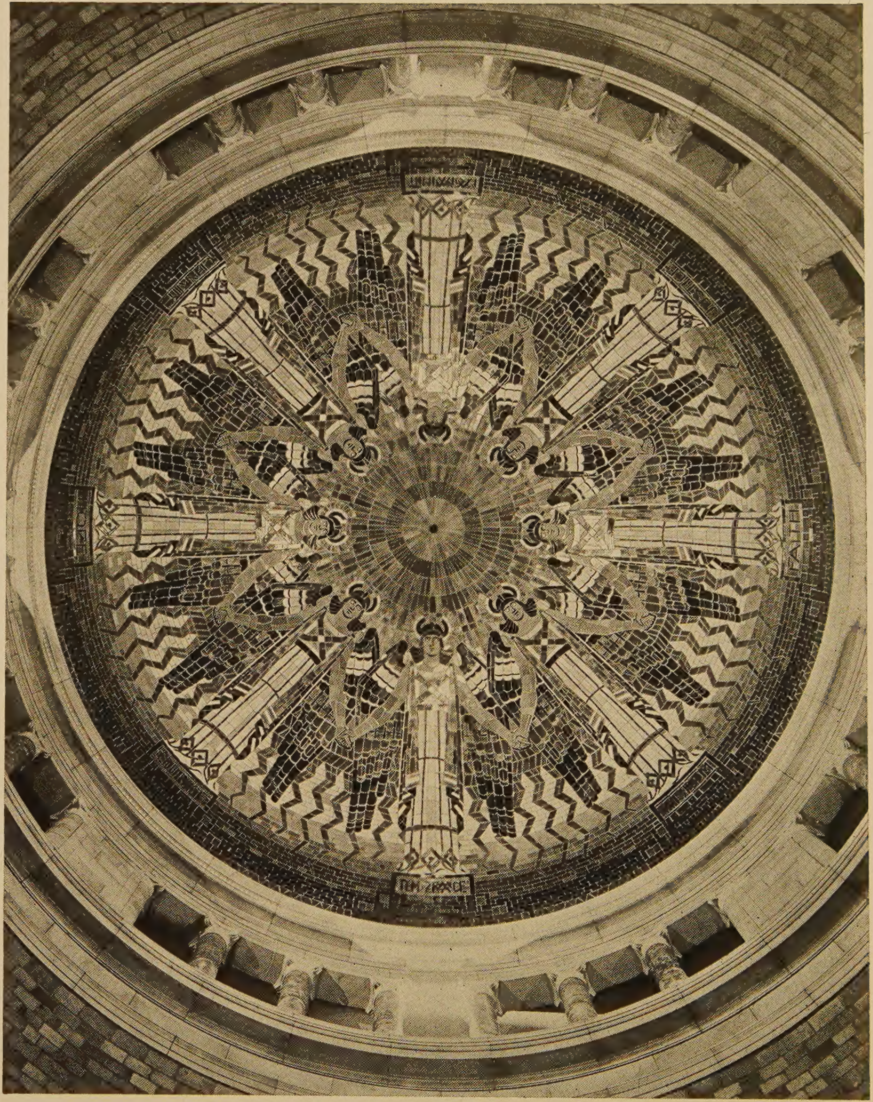
Ceiling of the vestibule, the lateral panels representing the historic moments of human enterprise—Homesteading, Industries, Arts, and the guardians of social action—Law, Labor, Public Spirit, Religion



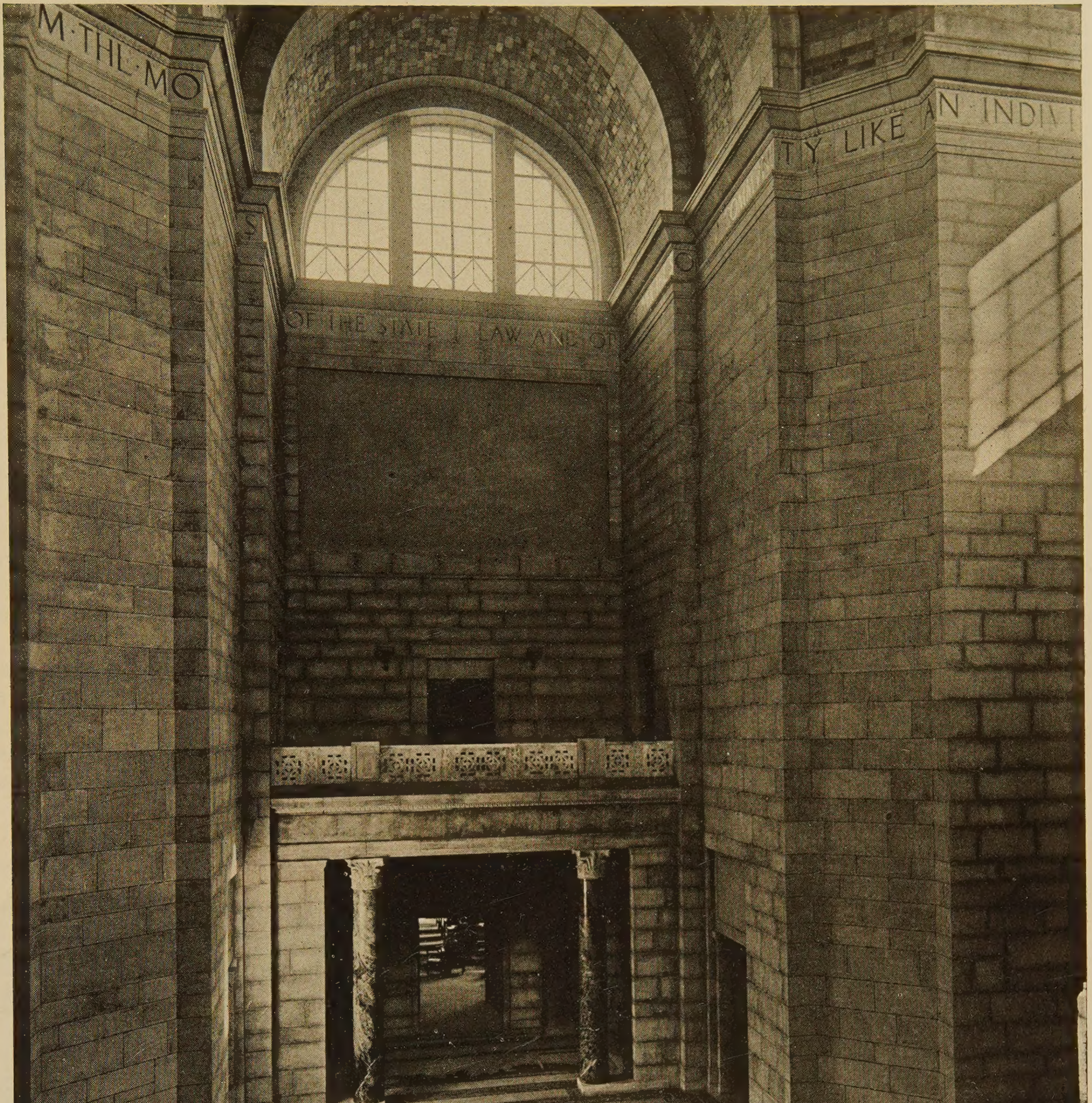
The foyer as seen from the vestibule, with its marble mosaic in the floor, its Guastavino tiles, vaults, and pendentives



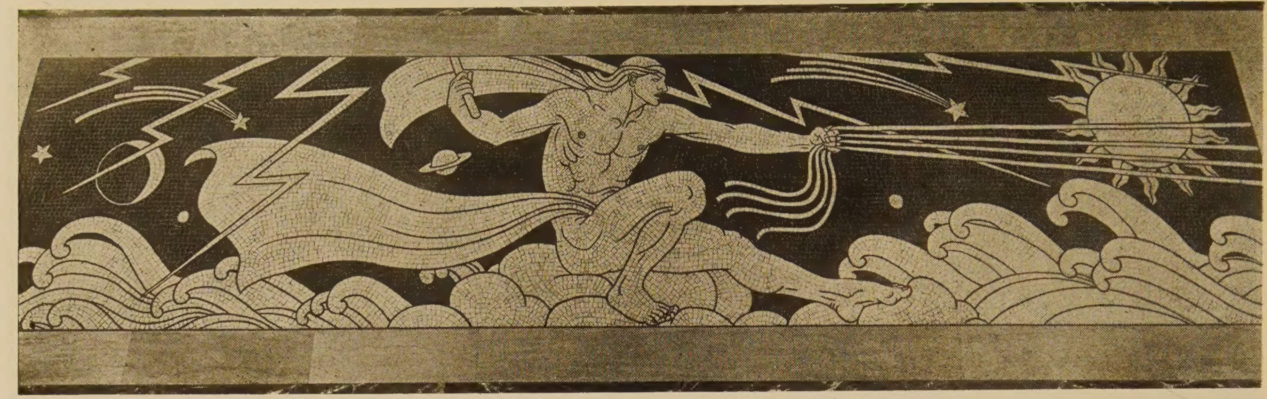
The rotunda floor as seen from the dome: the Earth Mother surrounded by Water, Fire, Air, and Earth



The rotunda dome with its figures of Charity, Hope, Courage, Temperance, Wisdom, Faith, Justice, and Magnanimity



The rotunda, showing part of the great guilloche of the floor pattern, with space left for future work above

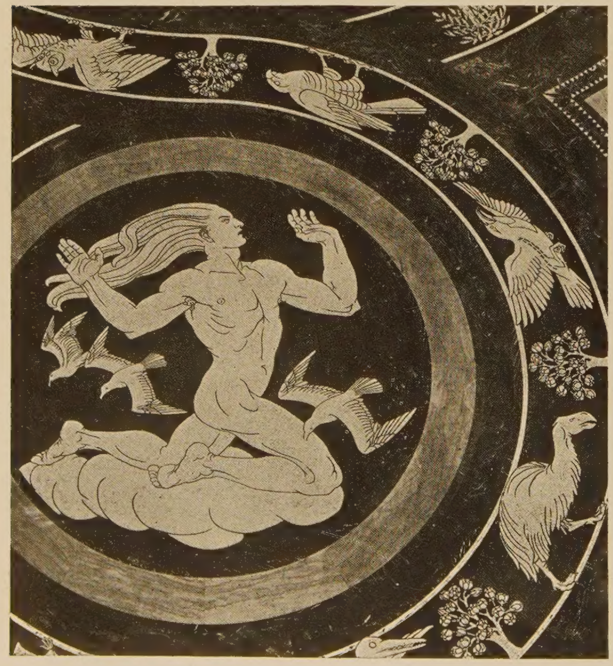


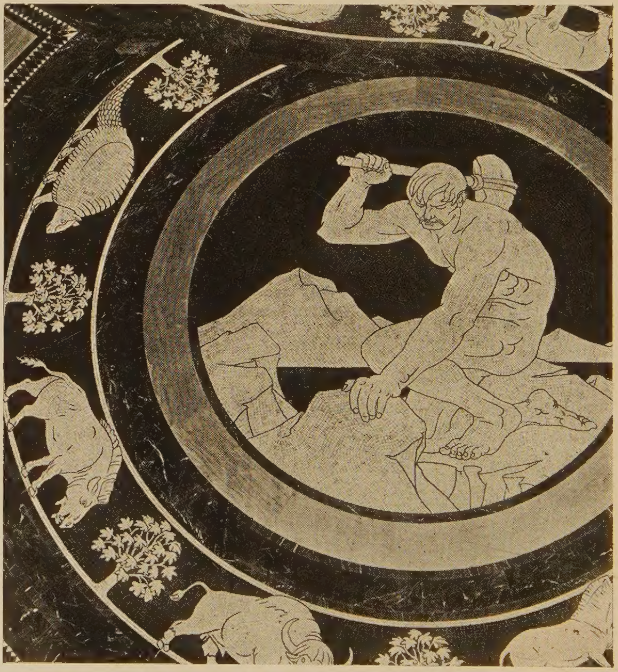
Cosmic Energy, one of the floor panels in the foyer, electric, driving through space and shaping stars and suns

braska; the reptiles that emerged with the marshes as the waters receded; the wing-borne, dragon and avian, that by some mystery of change hatched out from the egg-laying kinds; and finally the parade of the mammals culminating in the splendid mastodons and mammoths which by some fortune achieved their bulky climax on the old Nebraska plains.

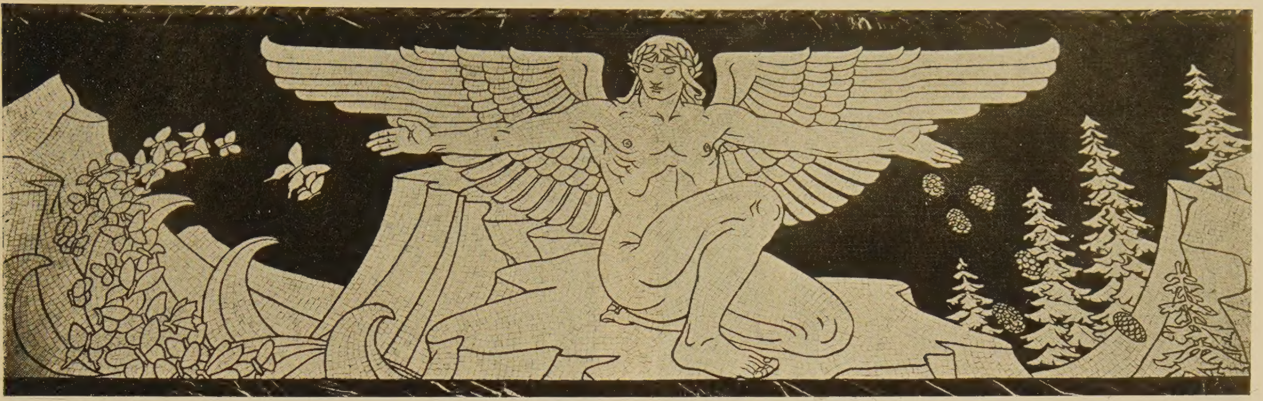
The theme is inevitable. But there are still the marginal panels, leading into the wings of Nebraska's Capitol for House and Senate and Supreme Court. Human life lifts itself up from the natural, and these panels signify this transition. At the very summit, the Human Family, father and mother and son; and laterally, toward the legislative chambers, an Athena and Erechtheus with Acropolis placed between, symbolic of the Mind issuing from the old autochthonous world, and of a mind which could conceive of Democracy, and opposite a Capitoline Jove, with his eagle, symbol of the first Republic, and of the sire of mind and justice. This completes the symbolism of the floor, and invites whoever may wish to follow to carry on to the ceiling and wall decorations where the story of man's achievement moves forward.

Back in New York the first need was for the architects' approval, and this, in spite of the fact that a floor was already sketched and in contract, came with enthusiasm. Hardly less speedy was the assent of the Commission, and new sketches were made. Then came the balk; American contractors are accustomed to polychrome tessellation, using marbles from a dozen lands, but here





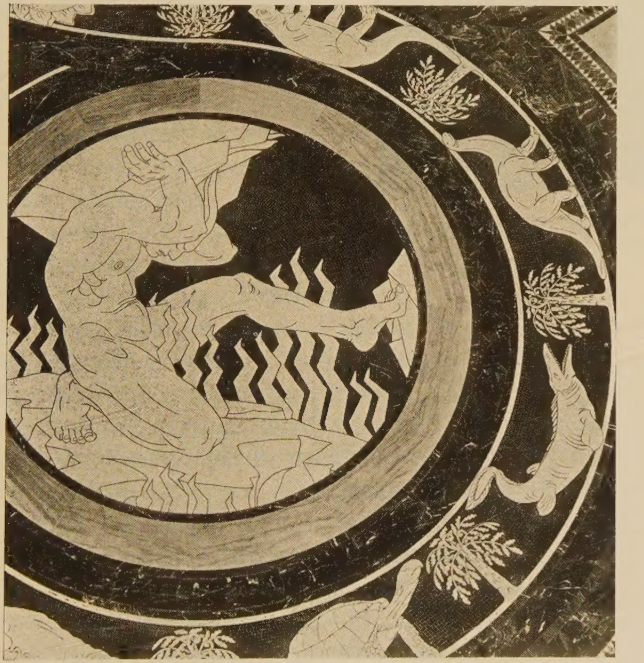
Two of the tondi in the central guilloche: at left, Air; above, Earth

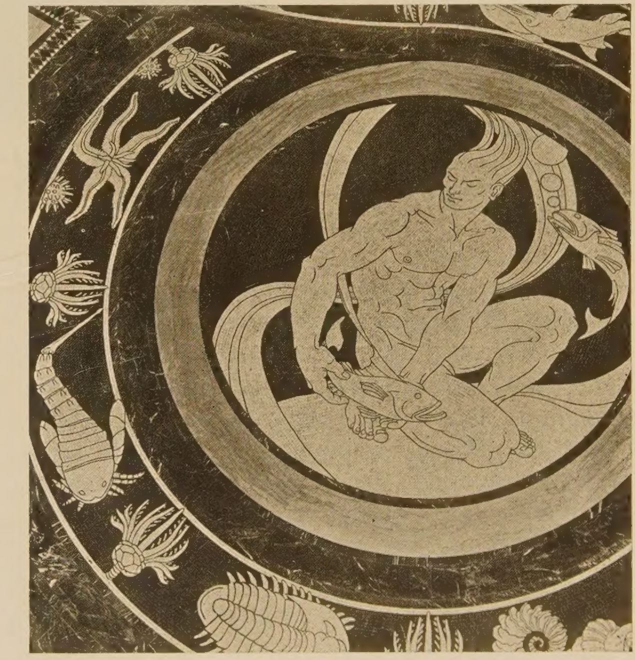


Vital Energy, one of the floor panels in the foyer, the splendid Eros with seed and nuptial-winged insects

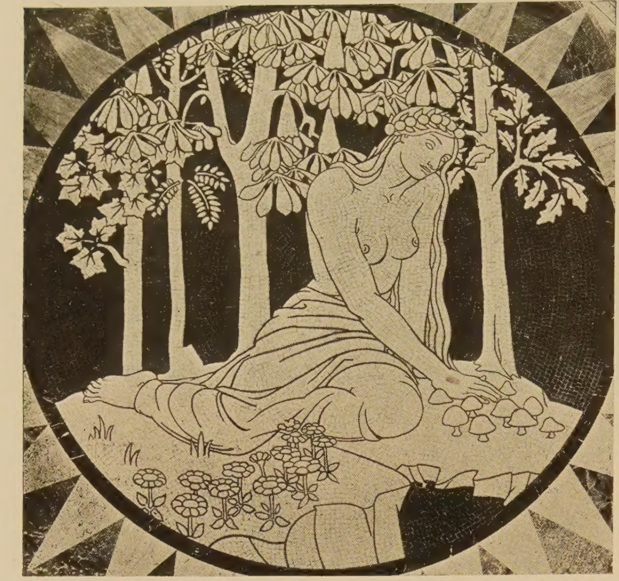
was an unfamiliar technic, and it seemed for a time that art and business could find no compromise. In the end, art triumphed, largely because of the artist's ingenious powers of simplification, creating what is after all a mosaic which is a drawing in stone. There are but two marbles in the pictorial panels, chosen for richness of surface and sharpness of contrast, light and dark, while the framing patterns are harmoniously designed in what might be termed a limited palette of marbles—greens and grays predominating. Meantime the design was developing thematically, image upon image, and in January, 1928, a gold medal was awarded at the Architectural League Exhibit to Hildreth Meière for her work for the Nebraska Capitol.

The floor is only a portion of this work, for to her has been committed the designing of the pictorial and symbolic features of the domed ceilings, the arches, and the pendentives of the monumental portion of the interior. This portion includes the vestibule, foyer, and rotunda, in connected sequence, the latter branching laterally to House and Senate Chambers. Other than the floor, this work is all in Guastavino tile, developed into brilliant polychrome, as in the mosaics. The dome and pendentives of the vestibule, symbolizing the gifts of Nature and the changing seasons of agriculture, were the first unit executed. This is above a floor done in polychrome marbles following a geometrical pattern—a floor with which few were satisfied, just such an one as any lobby might own, busily meaningless and antagonistic to the significant

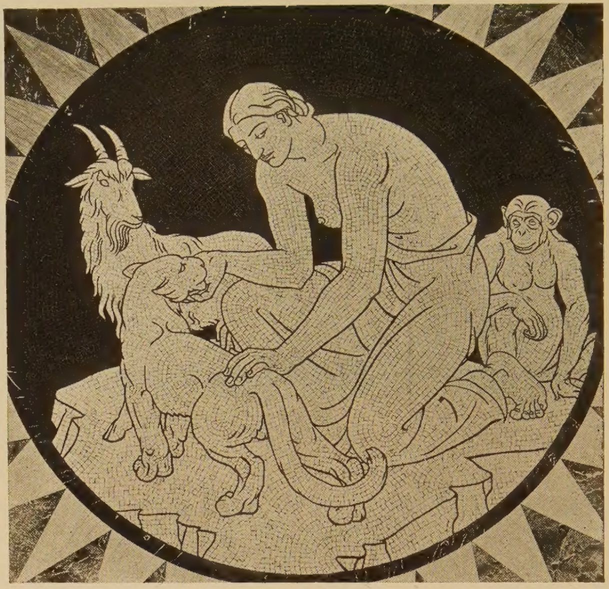




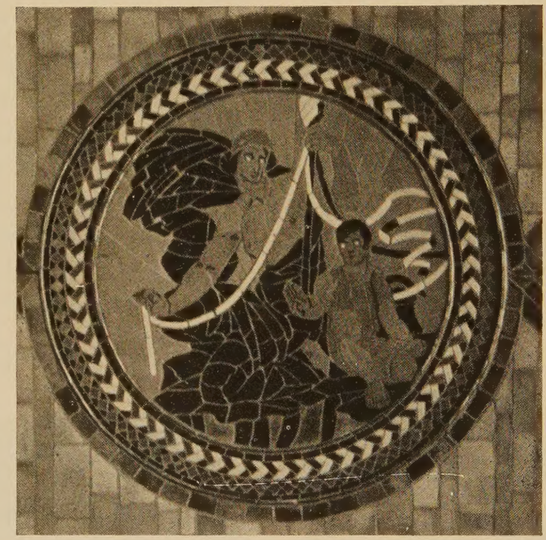
Two of the tondi in the central guilloche: above, Fire; at right, Water



The Vegetable Kingdom



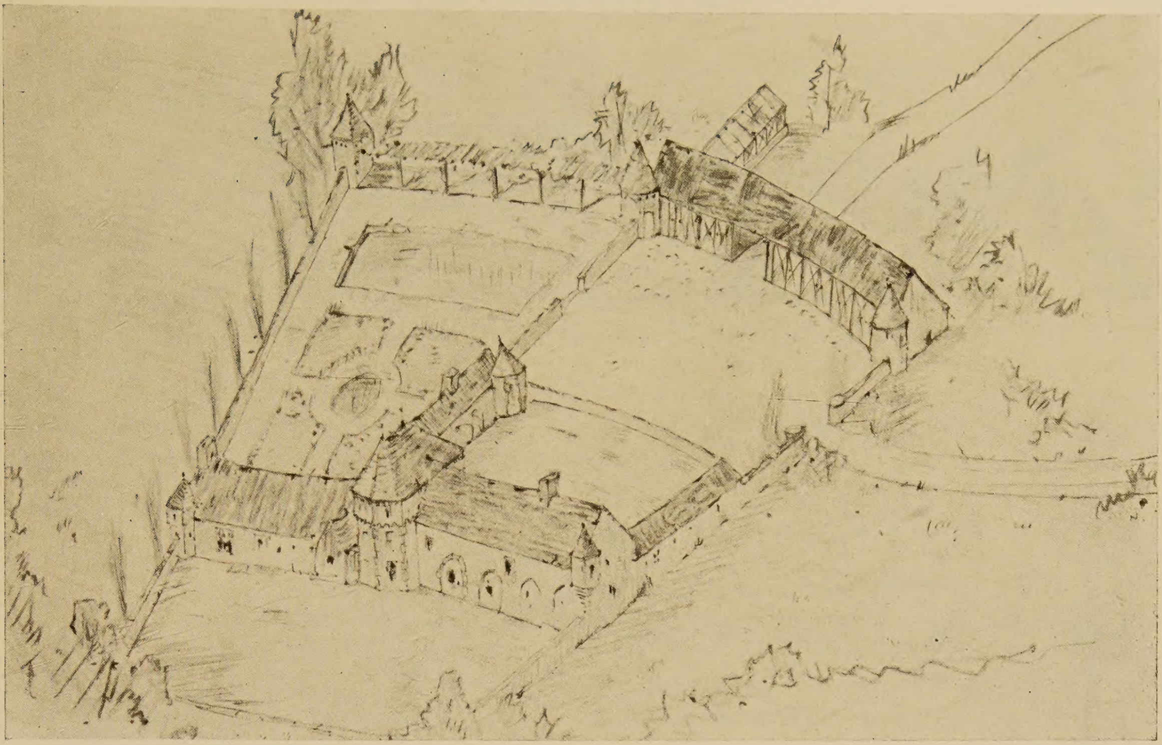
The Animal Kingdom



In a central bay of the foyer dome—Life of the Present

ceiling. If the public space were to be a monument, every important element of it, floor as well as wall and ceiling, deserved its appropriate symbols: hence the great floor of foyer and rotunda, in broad outline a celtic cross, is made to carry a meaning not less than that of the structural interior above. In the foyer this is planned as three domes, with lateral window arches below, and the centres of the domes and the springs of the arches are the foci of the ceramic vaulting. In the domes are the sibyls of the Past, the Present, and the Future of mankind; in the lateral panels are represented the historic moments of human enterprise—homesteading, industries, arts, and the guardians of social action—law, labor, public spirit, religion; the ensemble, as it were, reared as an ideal edifice above the primitive supports of existence typified by the spirits of the natural kingdoms in the floor below. Similarly, the rotunda: a hundred and thirty-five feet above the medallion of the Earth Mother is the magnificent dome of the Virtues which sustain civilization, a vast rose of winged figures, splendid in blues and crimsons and gold. A suggestion for this, too, came out of Italy, from the Chapel of St. Joseph in Chiesa della Pace, in Milan; but the work of Luini gave only the suggestion, for in Miss Meière's superb pattern of angelic forms there is nothing of the later Renaissance—Byzantine possibly, but the actual achievement is modern and architectural and inwrought. The image is at the climax of Bertram Goodhue's conception, the major focal point of the whole interior, and it answers his need.

There is more to come: the ceiling of another legislative hall, probably; the dome and floor of the memorial chamber in the central tower, certainly. But already Hildreth Meière's work for the Nebraska Capitol lifts her into distinction within her craft, and it is a distinction which need not hesitate in inviting comparison with the makers of the Sienna floor. Ours is a new world with new themes, but in such work as this in Nebraska it need suffer no abashment before the past.



A bird's-eye study—the sort of drawing that Mr. Forster is most likely to make as his first approach to a problem

Frank Forster

By Rayne Adams

THE peculiarly intimate quality of domesticity which attaches to the rural architecture of Frank Forster is a reflection, I am sure, of his understanding of the word "home." Yet it is the French "foyer" rather than the English "home" which serves as his inspiration. The *foyer* is not a house; it is a tradition. As interpreted by Barrett Wendell, this word "arouses the romantic image of flickering bonfires in huts or halls, of smoky rafters and chimneys, of uncouth and antique figures, gentle and simple, warming their transparent hands over glowing embers, and telling tales of things that were—heroes, saints, adventures, jests, ancestors and enemies, conquests and defeats, loves and deaths, famines and crops and herds." Romance? Yes, but only to the extent that it is understood.

For Forster's work is an admirable interpretation of the present in terms of the past. His leanings toward rural domestic architecture are so obvious that one is not surprised to learn that modern architecture of the office-building type has no lure for him. Nor, I take it, does monumental architecture, so called. He might conceivably have designed the palace at Versailles, but he would have taken pleasure only in the tiny *hameau* of Marie Antoinette. His alter-ego (for, like every one, he has an alter-ego) was born in the France of Louis XIII and he lived through all the years of Louis le Grand and of the Regency. He rode in a hand-built coach; the clothes he wore were of hand-woven stuff; the houses he built were lighted by candles. And along with his taste for armoires and bed-warmers, locks and chests of the *ancien régime,* he bequeathed to Frank Forster a special gift for designing in the old Norman manner.

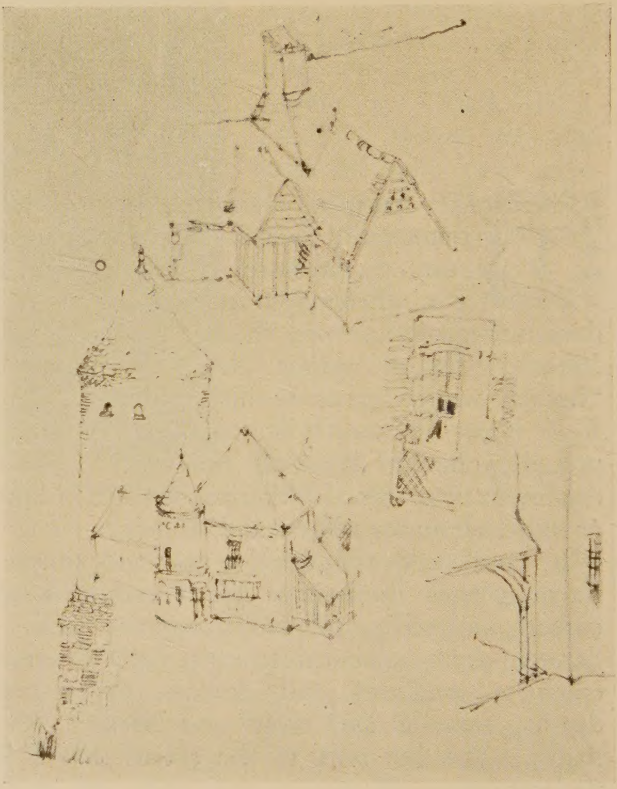
So be it; yet, it will be asked by those who believe they alone face the morning sun, whether, if architecture is to be vital, if it is to correspond to modern habits of living, the resurrection of its expressions in the dead past is justifiable? The Brittany cottage may be a rude thing, but it was not so considered when it was built centuries ago. To-day, when we seek to reproduce it, how often is the indescribable hallmark wanting! And if modern improvements in building methods and materials permit us to

A study in balance and mass. Most of the drawings of this kind are on tracing-paper, upon the back of which Mr. Forster uses colored pencilling

An early sketch of a farm group, reproduced at the a·tual size of the original

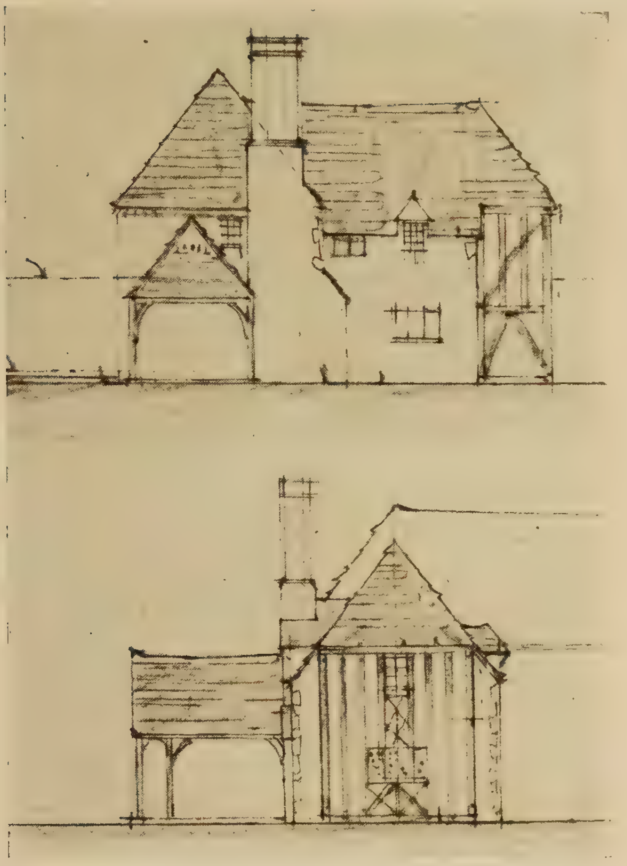
have much light in our interiors, why go back to that type of building, much of the charm of which lay in its small window areas and its blank walls? Are we weaving a coat of cobwebs, all the while thinking it is wool? Is our resurrection of the "styles" expressive of genuine feeling, or is it a masquerade? Can we interpret modern houses in terms of ancient formulæ?

Forster would admit that the formulæ may be ancient, but he would protest that they are not outworn. There is, in support of this view, the symbolic truth which is contained in the doctrine of metempsychosis. For many of us find our instinctive tastes and desires unsatisfied by the offerings of the present. In proportion as we penetrate into certain periods of the past, we seem to breathe more freely. If you say that the builders of these earlier days were abreast of *their* time, and not copyists, one may reply that, to the extent that we feel in sympathy with the life of their period, we too may be pioneers —if we are gifted. And it is this sympathetic understanding of French provincial work which gives Forster's rural architecture its authentic quality. So immersed in the ways and manners of Norman provincial architecture is he, that, on many occasions when he found the published data lacking, he has "invented" certain details, only to find, through further investigation of the old houses of Normandy, the very details which he had "invented." This might be, you will perhaps say, coincidence; as a matter of fact, it is simply concrete evidence that Forster thinks as did the designers of these houses.



Typical sketches used in developing minor motifs

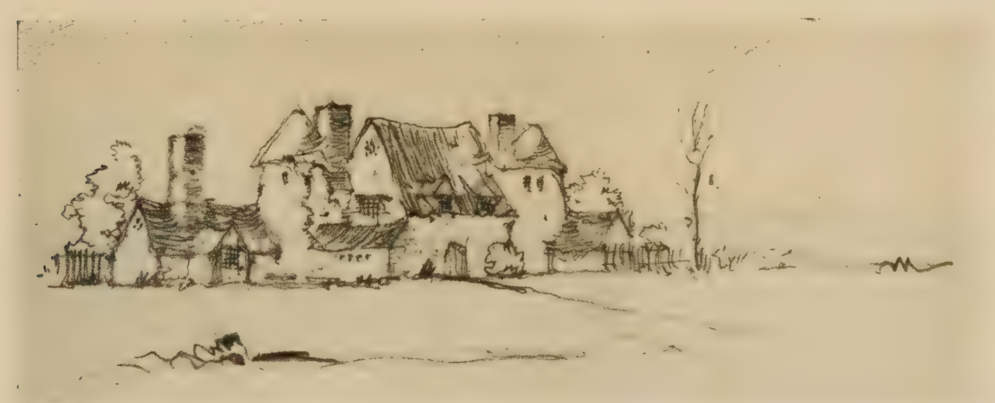
Yet there is still a difference, for when these older houses were built, they were not only



Development at small scale of front and side elevations, backed by colored pencilling

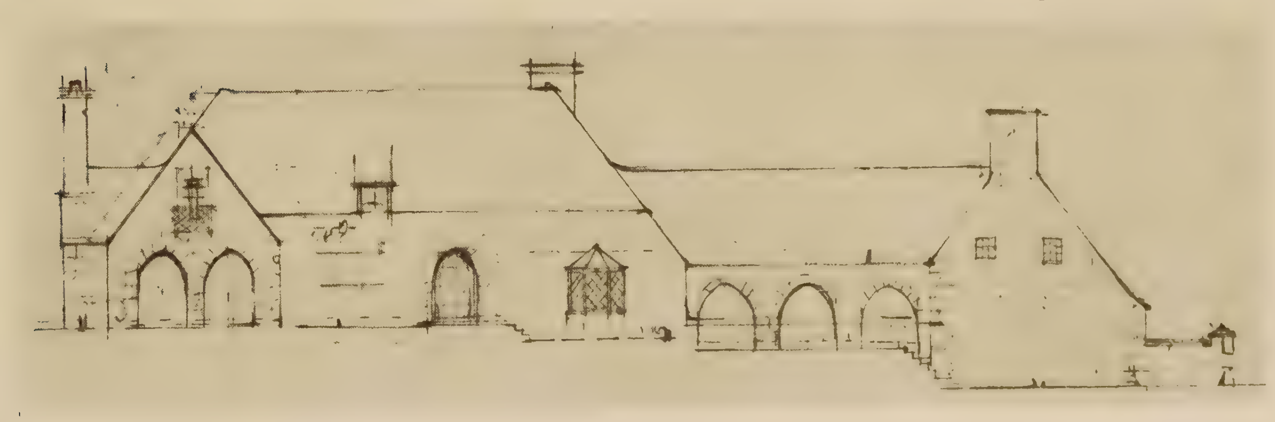
modern for their time, but they *looked* new. Why should an architect of to-day take great pains to make his country houses look as though they had been built by unskilled workmen—or at least by workmen endowed with a wayward temperament—and as though, in spite of their youth, they had suffered heavily from the corroding touch of time? We don't dress in such fashion as to give the impression that the clothes we wear were bought when Buchanan was President. Is it proper to treat architecture—even rural domestic architecture—as though it were a part of the make-believe trappings of the theatre?

The answer is not, I believe, difficult. Just as Ponce de Leon sought for the fountain of youth, because he had a desire to live while other things passed away, so, broadly, all of us seek in some way or other the same end. If we wish to feel young, perhaps the antiquity of our surroundings will enhance that feeling. And whether we have recourse to make-believe methods or not makes little difference. When we build we begrudge the years which must pass before our house looks as though it "belonged." And yet, the premature aging of houses takes skill, even though it be nothing more than the simplest attempt to help nature



Another typical study in composition reproduced at the exact size of the original

In all his compositions Mr. Forster lays great stress upon the adaptation of his main masses to differences in topographical elevation



The sort of tiny elevation sketch which Mr. Forster makes as fast as he thinks

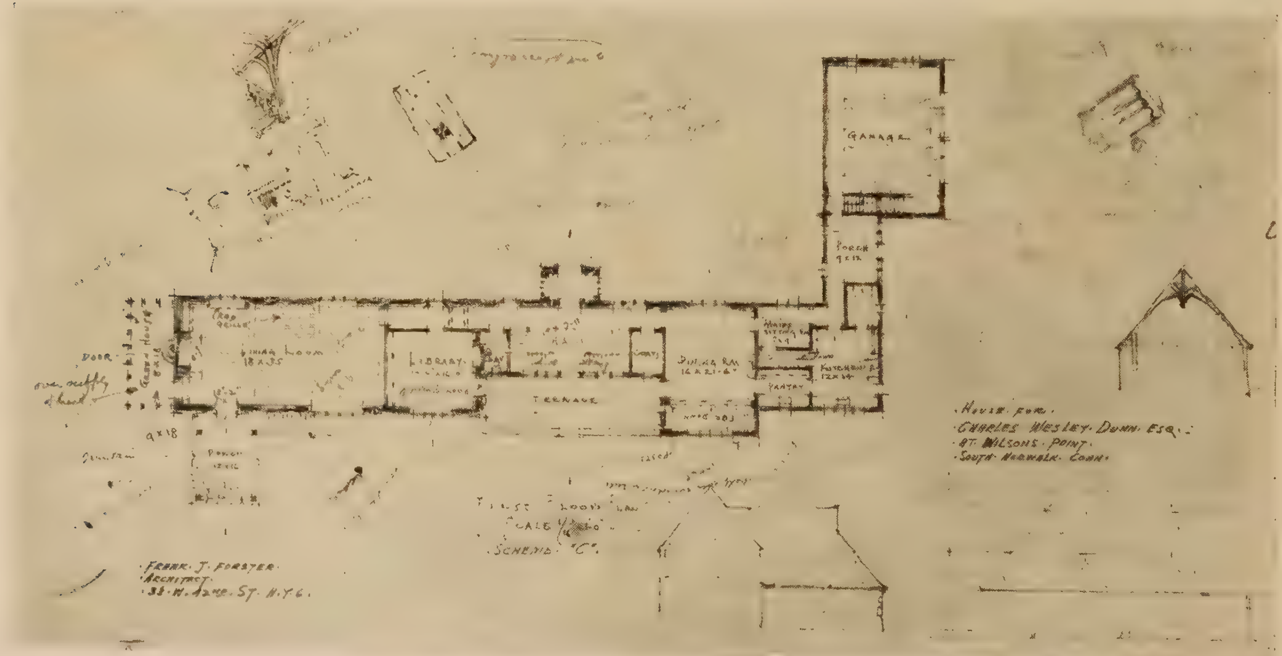
out. And the skill shown by Forster, measured in terms of the possibilities of building materials and of obscure and laborious processes, may be appreciated best by studying his work; in it he manages to give, almost from the beginning, the mellow quality attendant upon that slow decomposition which is the bond of mortality.

And so, when we come to ask how Forster works to give his architectural conceptions an objective reality, we shall find, with some surprise perhaps, that there is nothing unusual in his general procedure. Like most architects, he "thinks with his pencil," and like most men of caution, he does not form his conception without having first digested the possibilities of the site. He does not study with clay or plasticine models save as a means of checking his pencil drawings.

There are two qualities of his thought which are of interest, however, in relation to his predispositions in planning a house. A rural dwelling is to him an intimate affair. The idea of sequestration which attaches to the word "close" is better understood in Europe than in this coun-

The rough but accurate perspective study of an entrance hall, only faintly suggesting the wealth of idiom that will later be developed

A preliminary sketch plan shown to the client on which it is Mr. Forster's habit to make pencil notes during the conference, serving as reminders for the drafting-room

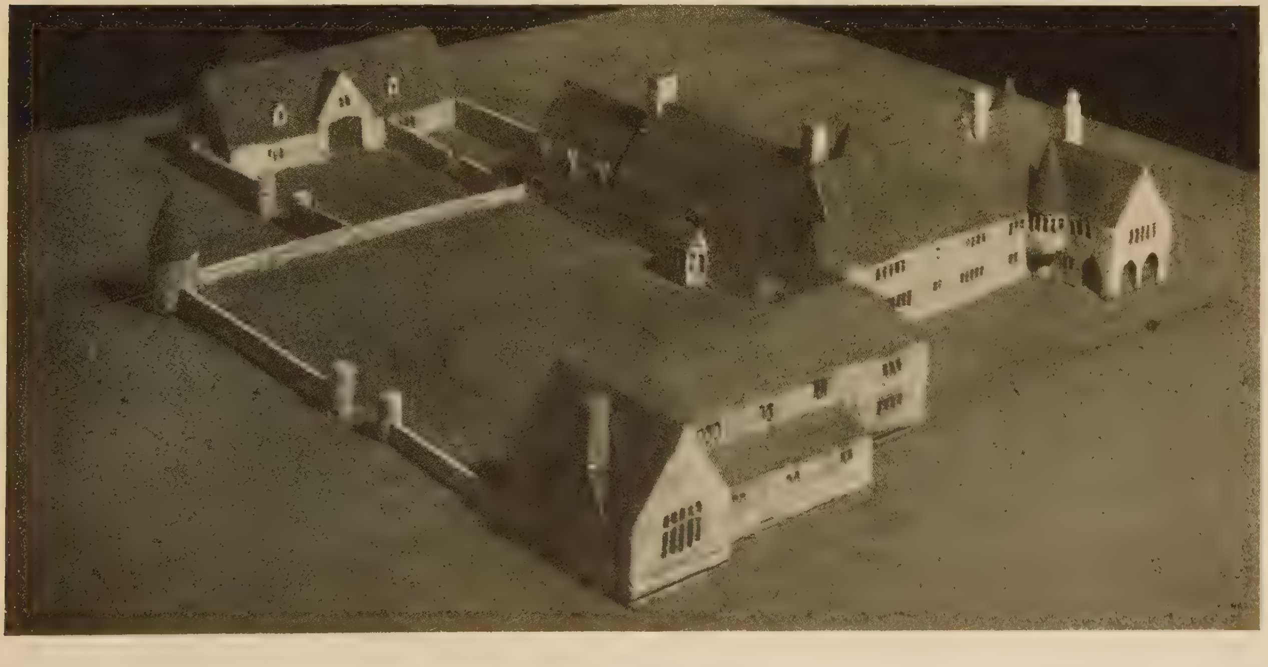


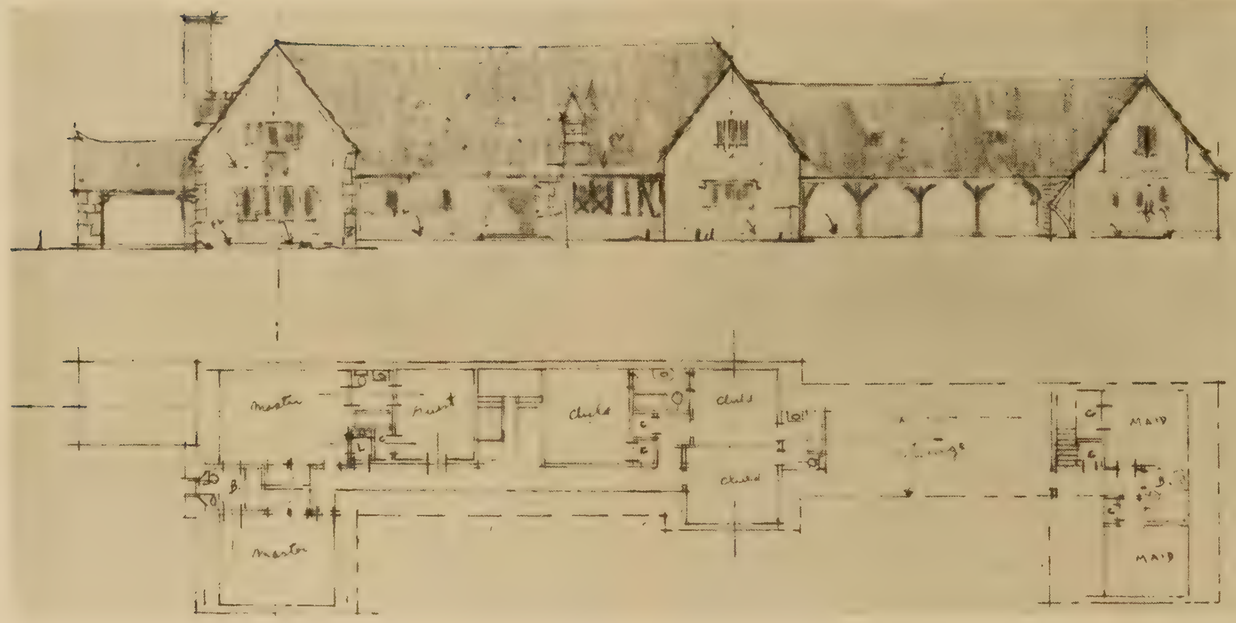
A sketch of a country house in its early stages, developed from a tentative plan fitting the uneven site

A characteristic thumb-nail sketch, feeling for the logical development of a plot

try; involving, as it does, the suggestion of enclosing walls which exclude the outer world of men and beasts. And although he is sometimes able to express this thought quite fully, often he has to compromise. But if he has to effect compromises in this matter, he is more fortunate in being able to express without hindrance his other predilection. With the same deliberation that certain architects seek to establish axes, he attempts to avoid them. It is not strange to find that he thinks of his problem first in terms of its elevation. Since the plan will be asymmetrical, it can be counted on—at least in the earlier stages—to look out for itself. It is playing, to a certain extent, with fortune, but I believe that Forster would hold that beauty is the child of hazard. In adopting the principle of asymmetrical planning, he cuts the guy ropes which so often serve to hold an architectural conception from blowing away, but its adoption calls for a greater effort of the imagination if the result is to be worthy.

Mr. Forster uses models freely, but usually after having arrived at a nearly final solution by means of drawings in plan, elevation, and perspective

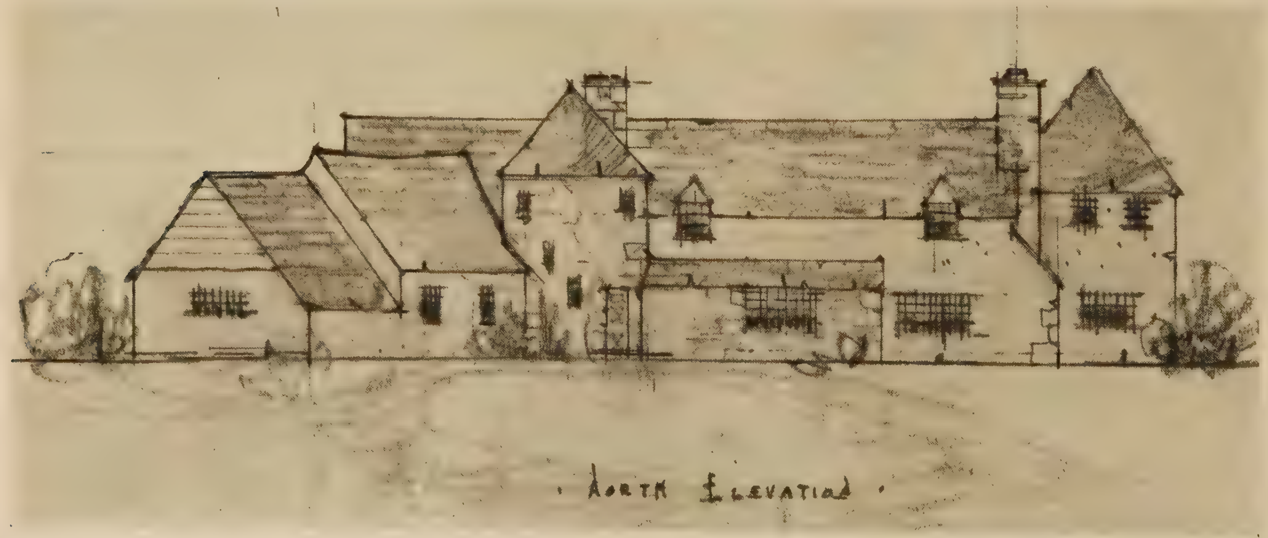




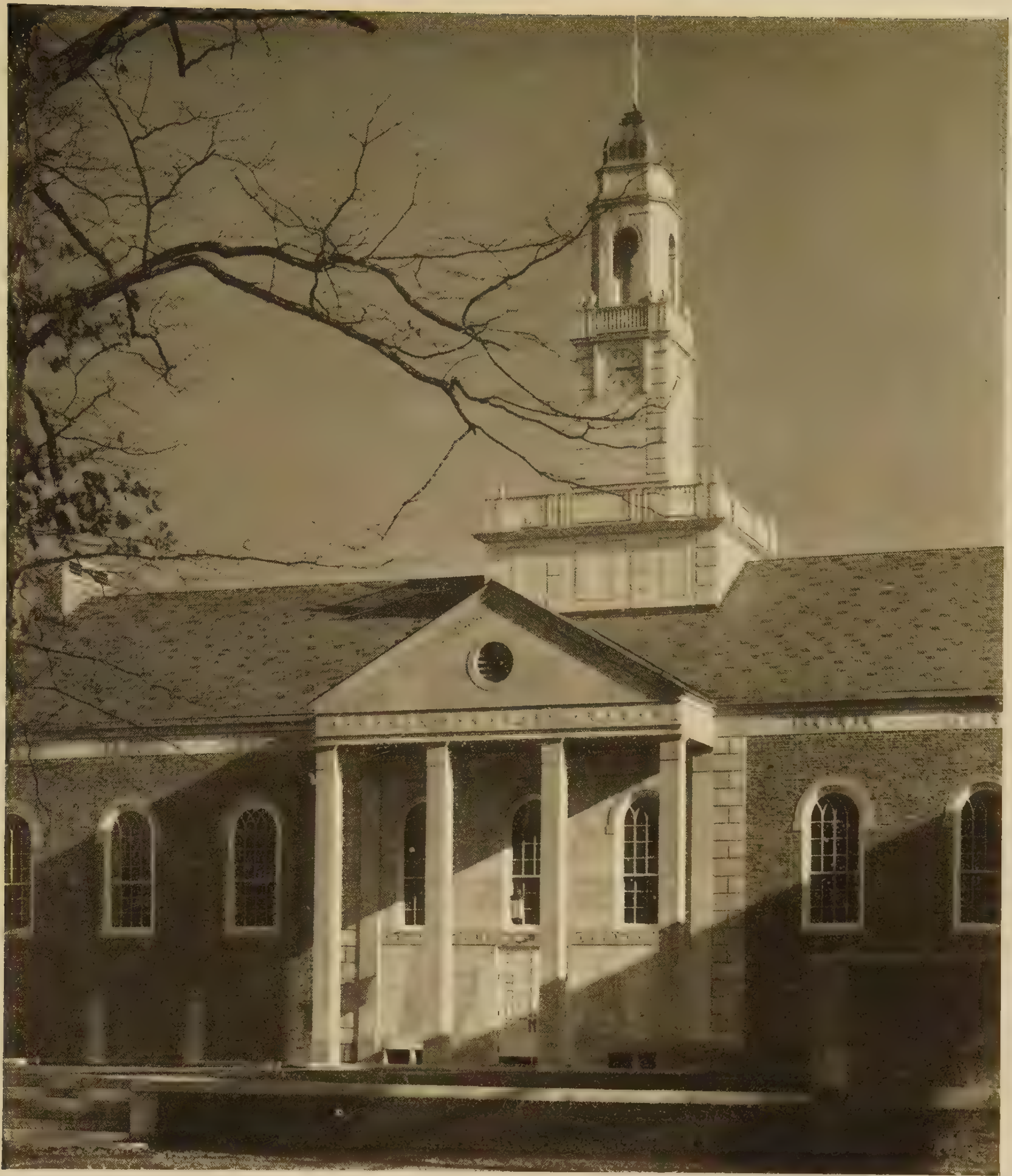
Typical plan and projected elevation. Notice that the second-floor plan is the more important one in arriving at the roof treatment

However much Forster may give himself to the play of the ordered forces of disorder, his plans always "work," and however asymmetrical may be his conception of planning, certain it is that in his office practice nothing is left to chance. His construction details are standardized in a most orderly way. The close cornice has been studied by him so thoroughly that it is no longer a vexing problem.

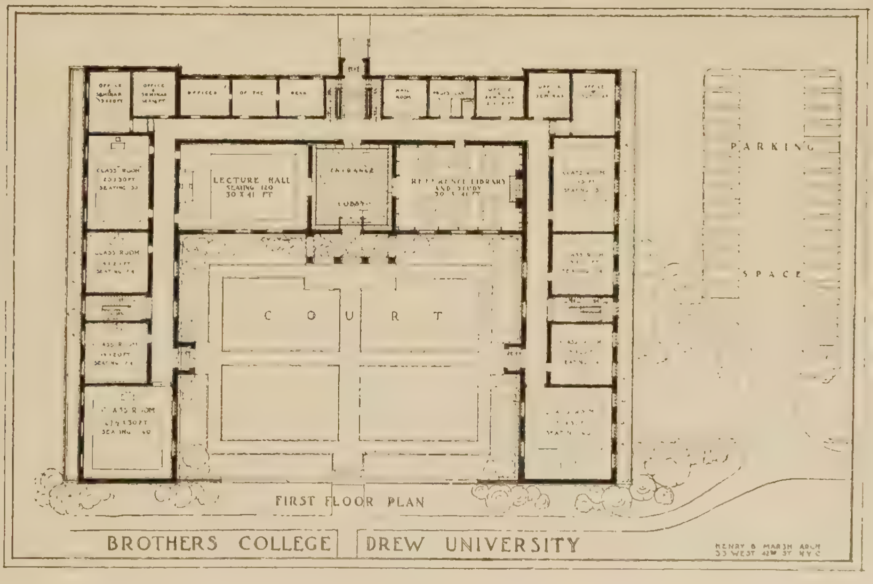
I have spoken of compromises which must be made in order to interpret the Norman provincial architecture so as to meet the requirements of modern life, yet there seems to me only one which is really difficult to avoid, and that is the one involved in the relation of window area to wall space. And when I asked Forster how he managed to meet the difficulty, he smiled. The smile was enigmatic. Perhaps his clients also have alter-egos who still live in the ancient houses of northern France, and perhaps they believe that small windows, properly disposed, admit *sufficient* light. Who is to judge?



A typical early study of mass in elevation marked by Mr. Forster's instinct for asymmetry. Here, as in most of his sketches, much of the charm results from color pencilling certain areas on the back



Photographs by Tebbs & Knell



BROTHERS COLLEGE,
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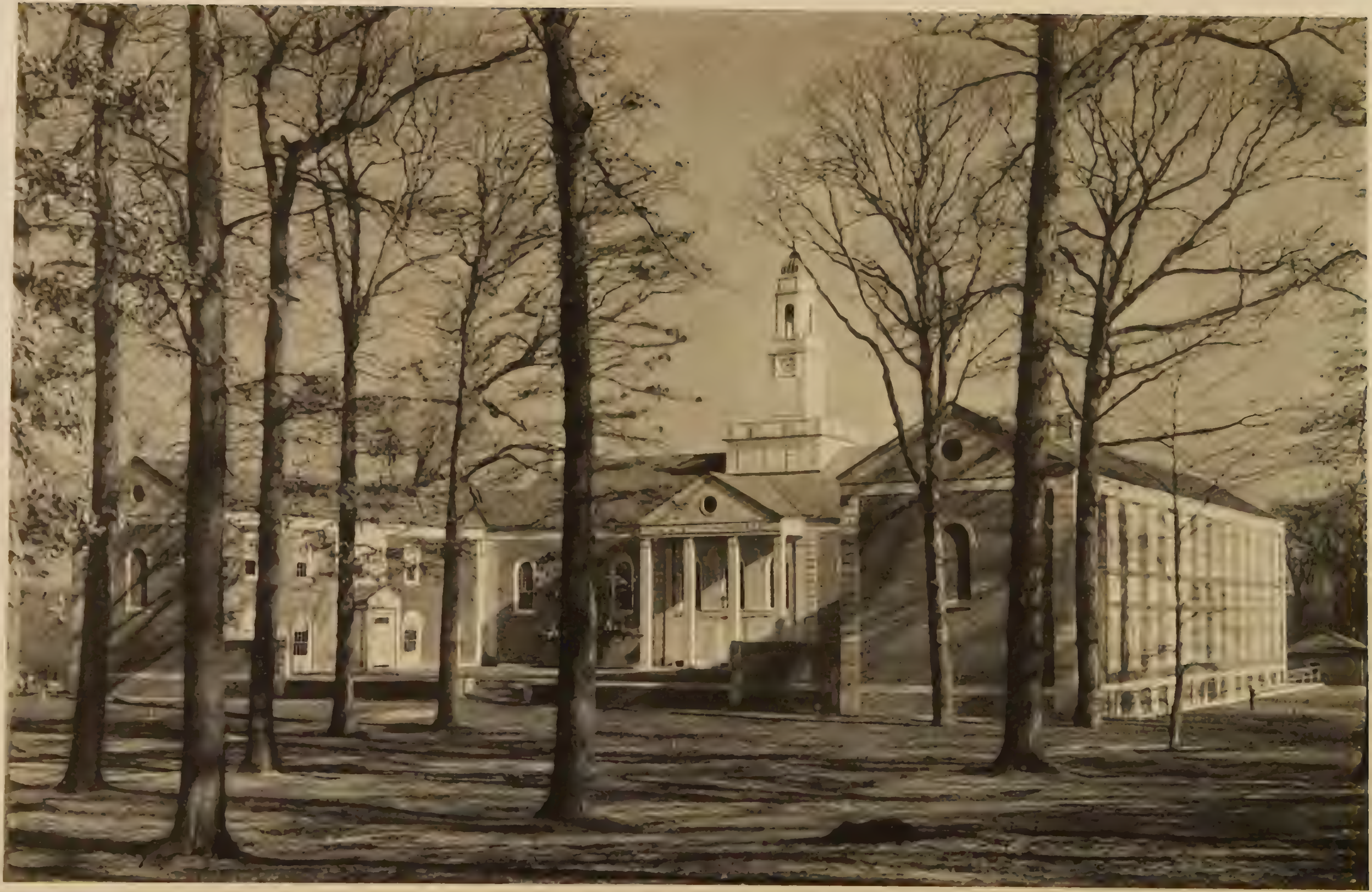
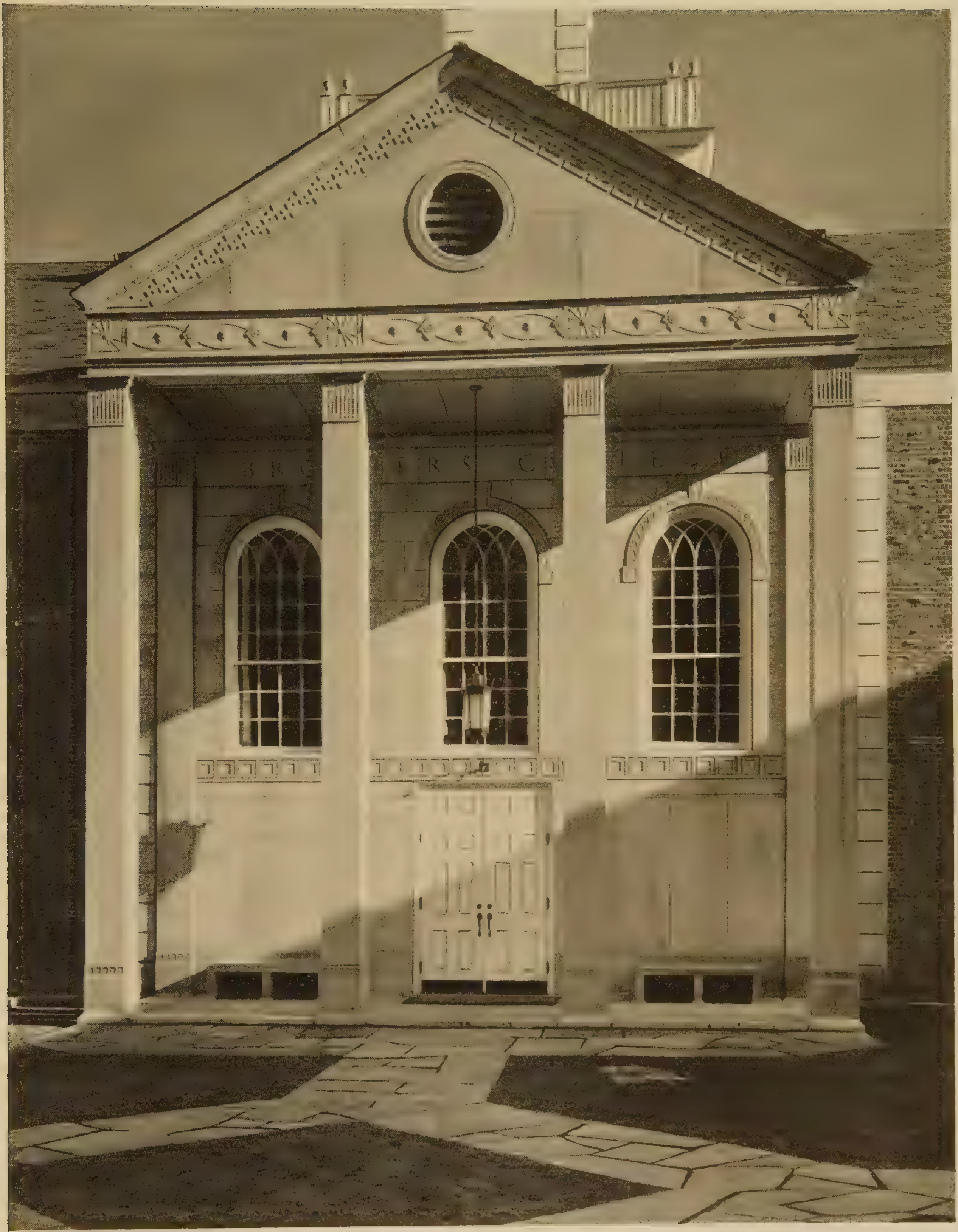
MADISON,
N. J.

HENRY B.
MARSH,
ARCHITECT

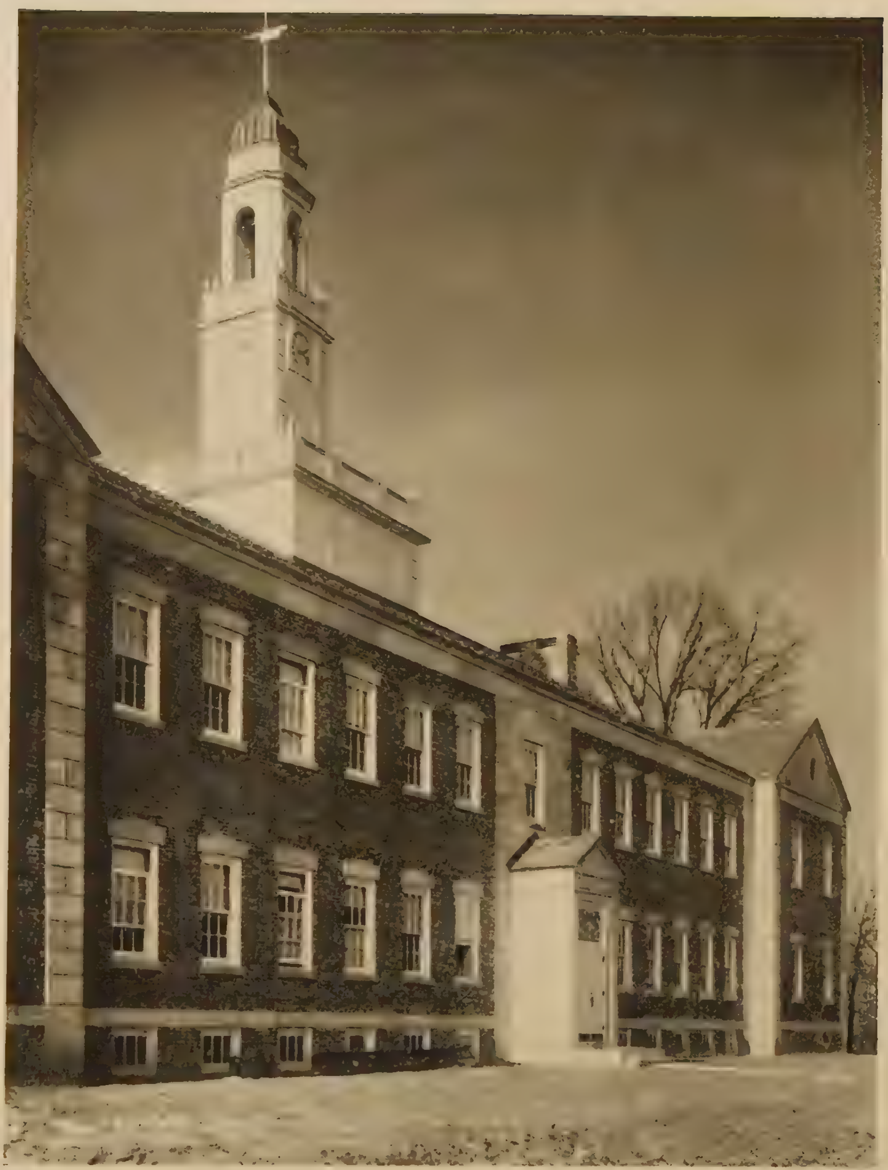


Brothers College, Drew University, Madison, N. J.

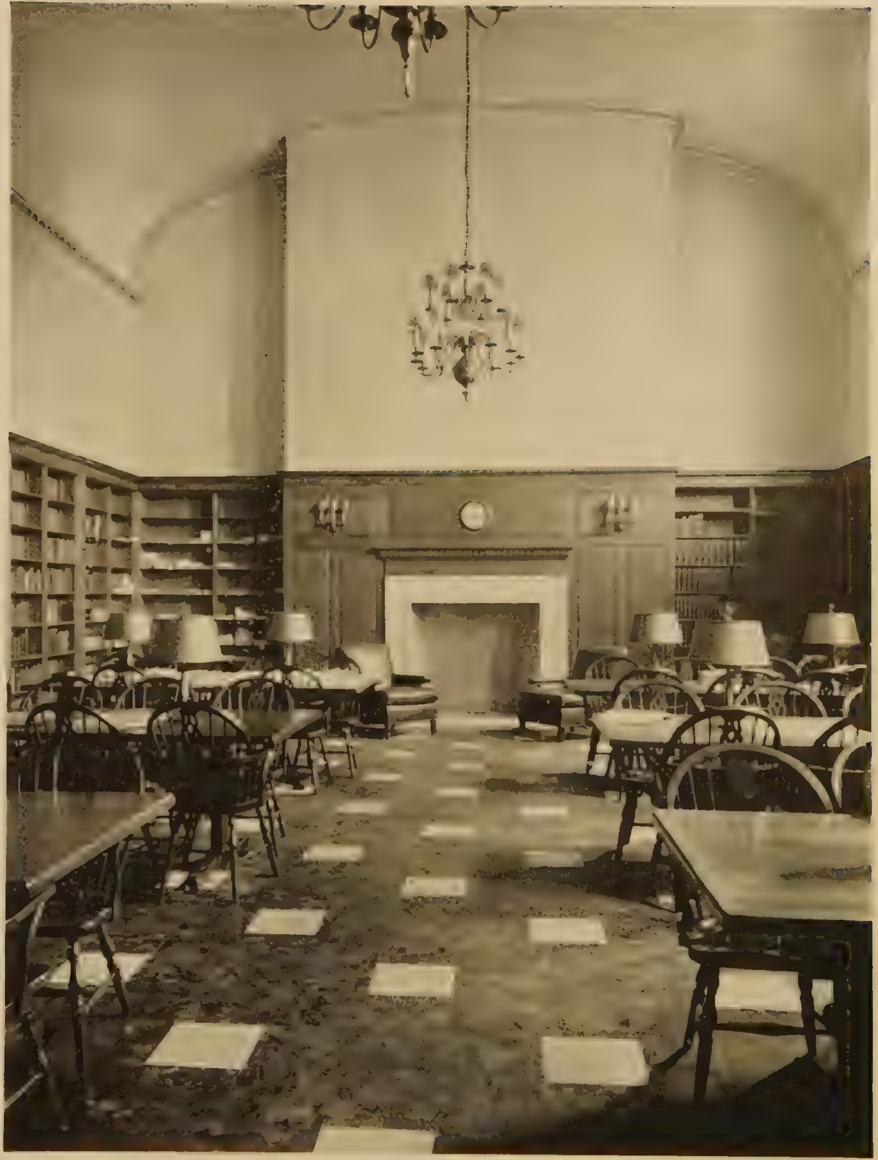
HENRY B. MARSH, ARCHITECT



Brothers College, Drew University, Madison, N. J. Henry B. Marsh, Architect



The rear façade



Reference library and study

Brothers College, Drew University, Madison, N. J.

HENRY B. MARSH, ARCHITECT

By courtesy of
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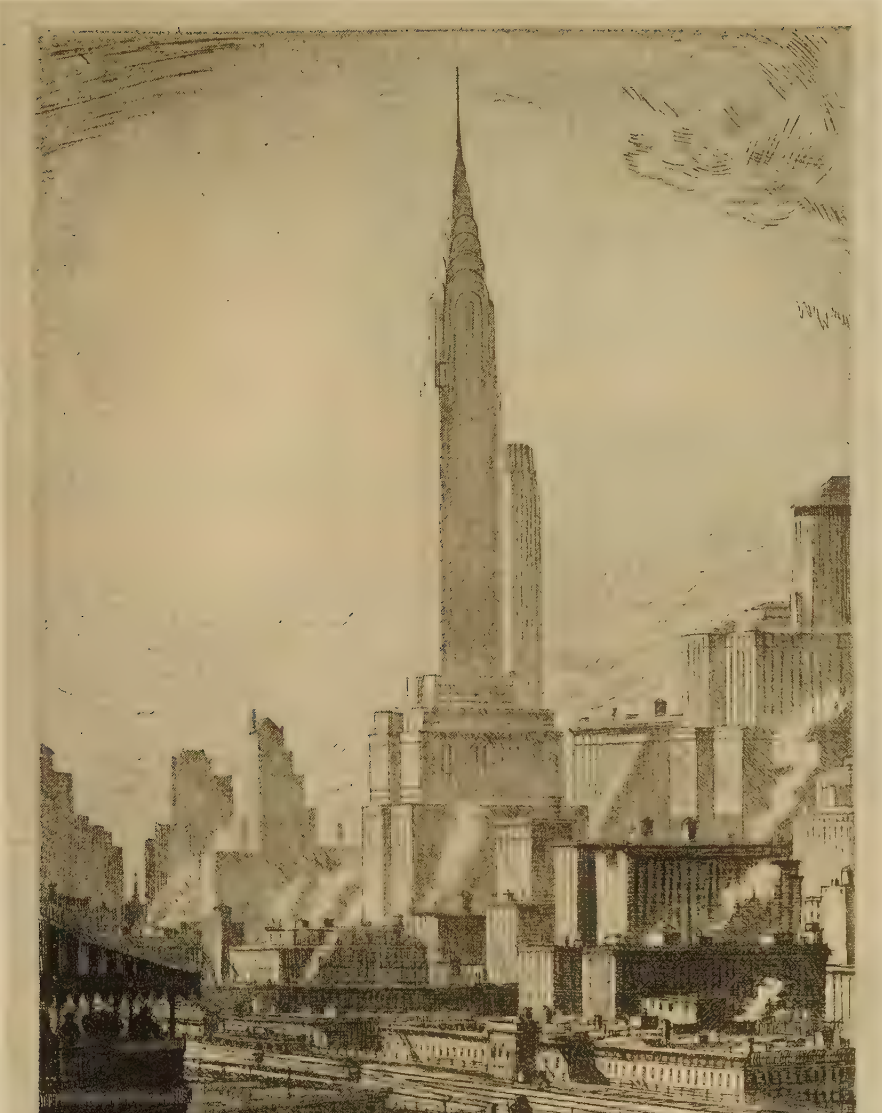
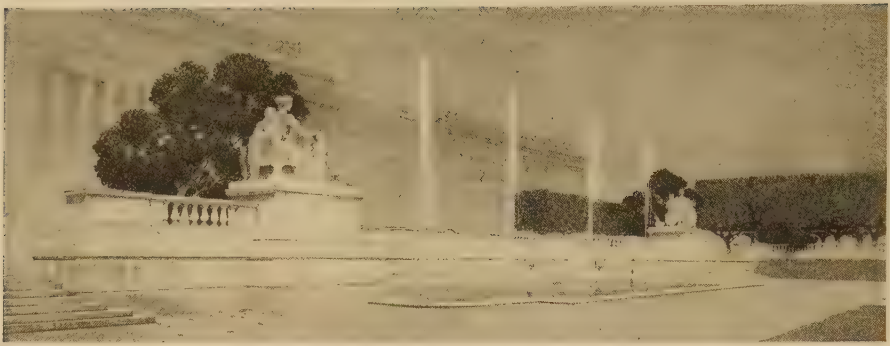


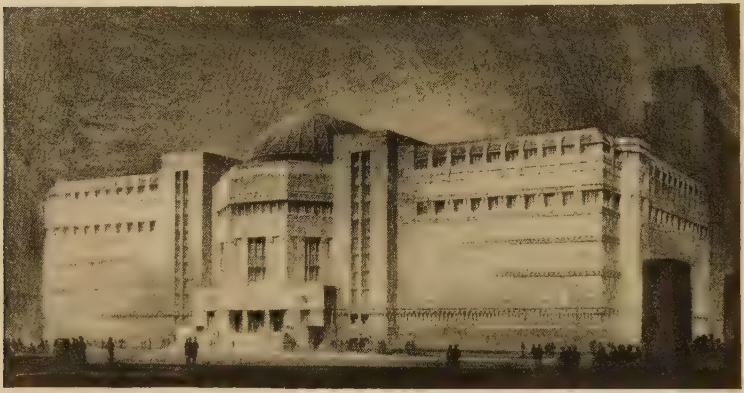
FORTY-SECOND STREET
GROUP
—TOWERS OF
MANHATTAN

From the etching by
ALBERT
FLANNAGAN

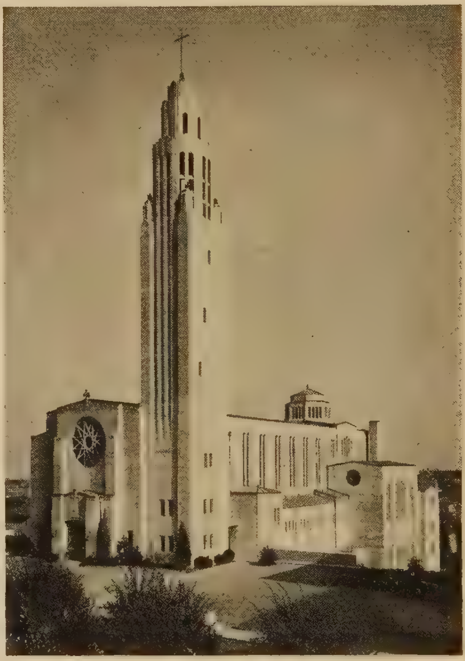


Fountain in memory of Oscar S. Straus, to be erected in an interior court formed by new government buildings in Washington. Office of John Russell Pope, architect

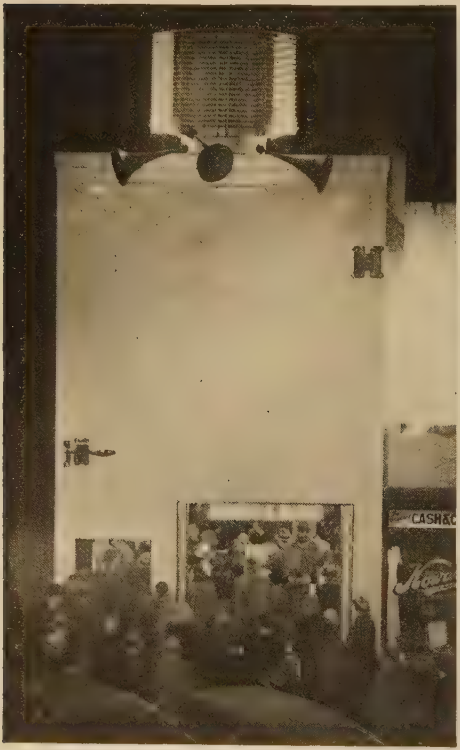
Architectural News



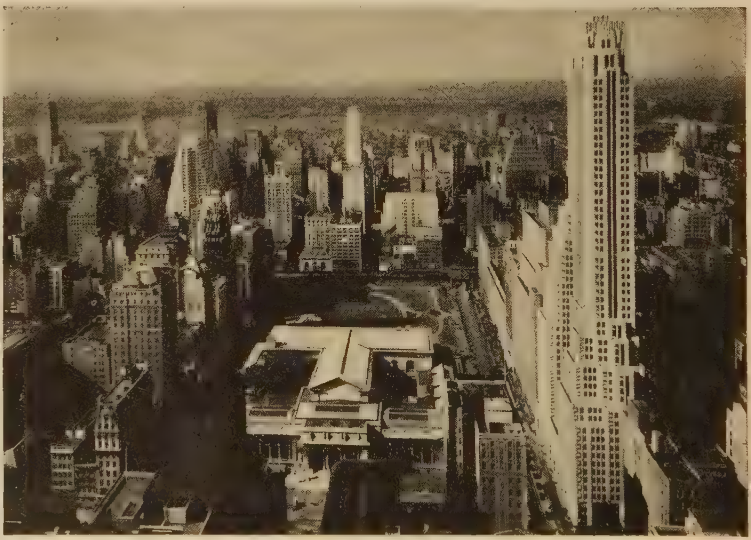
The proposed Museum of Natural History and Planetarium for St. Louis. W. P. Manske & Associates, architects and engineers



St. Joseph's Church, Seattle, Wash. A. H. Albertson, architect; Joseph W. Wilson, Paul Richardson, associates. See interior opposite

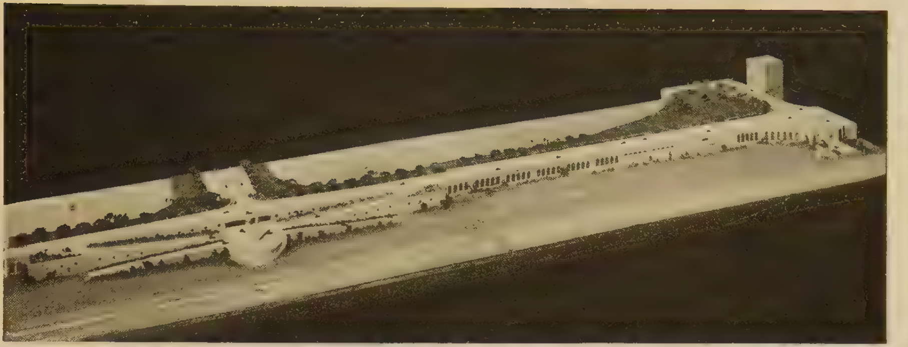


West Philadelphia is taking a leaf from California's book in this refrigerator store, twenty-five feet high without the top

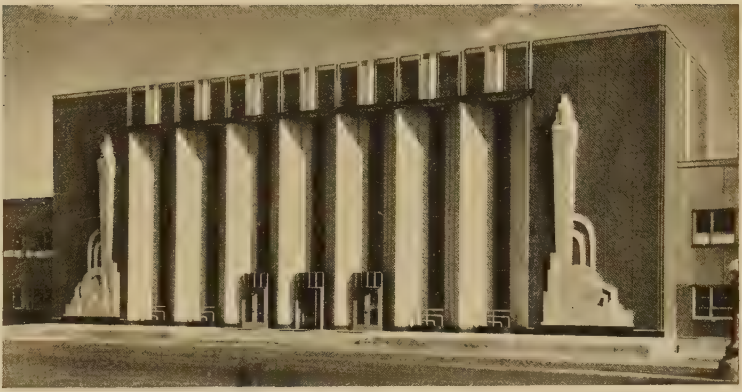


A recent airplane view of the New York Public Library, centre—500 Fifth Avenue, Shreve, Lamb & Harmon, architects, at right

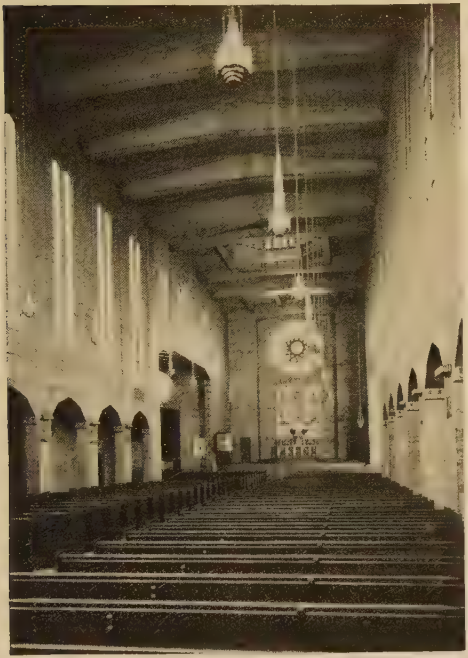
Proposed treatment of Riverside Park, New York City, from 72d Street to 80th Street, with the Express Highway. McKim, Mead & White, architects



in Photographs

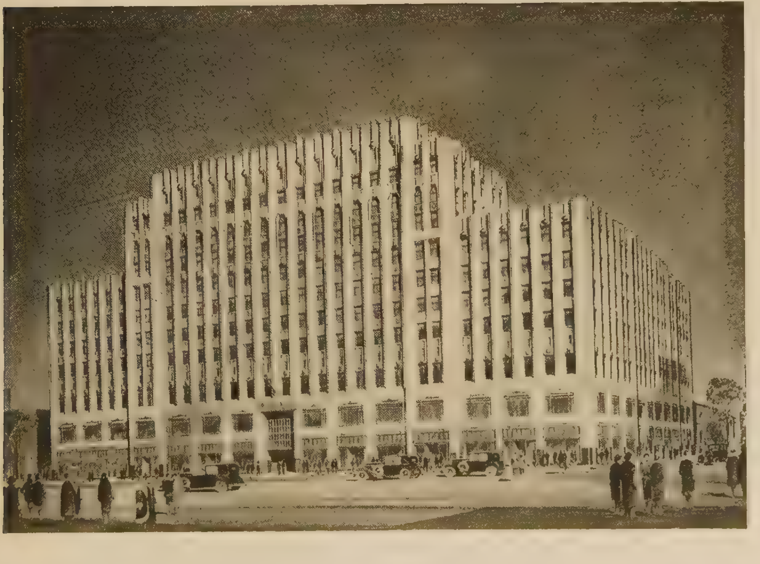


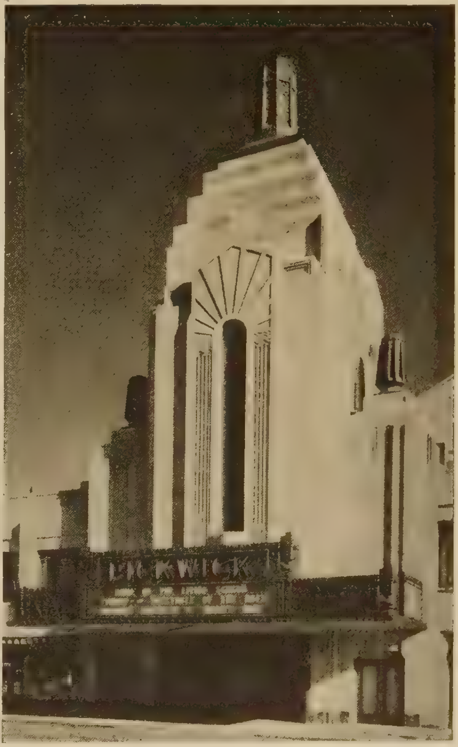
One of the first of the Chicago World's Fair buildings, now completed and used for administration purposes. Burnham Brothers, Inc., architects



Interior of St. Joseph's Church, Seattle, Wash.—an effort to secure churchliness without the traditional ecclesiastical forms

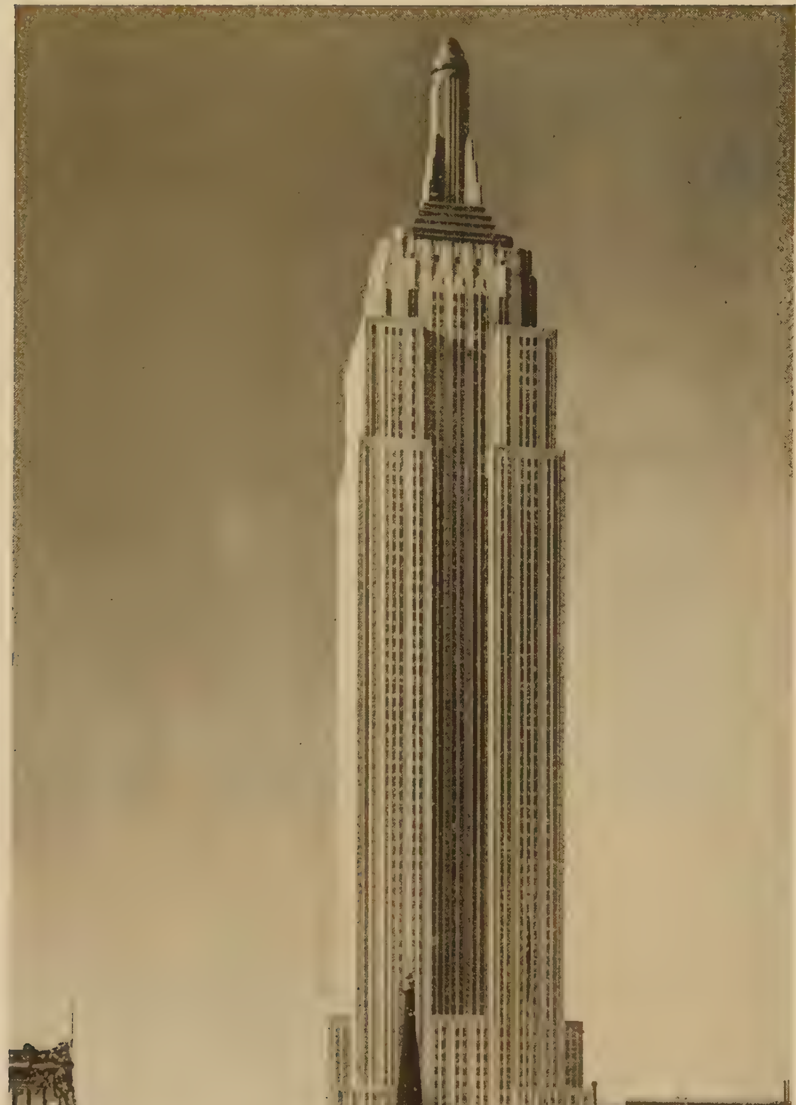
The proposed new Center Building for Detroit, nearby the Fisher Building. Albert Kahn, Inc., architects and engineers





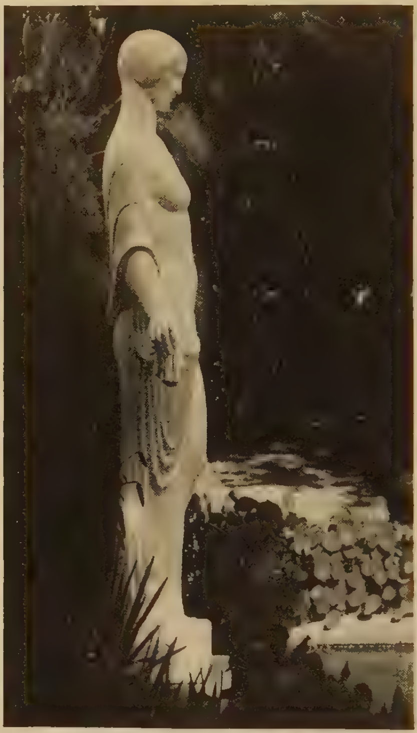
The Pickwick Theatre, Park Ridge, Ill. —contemporary form in Indiana limestone. R. Harold Zook, architect; Zook & McCaughey, associates

A Picto- of Architectural

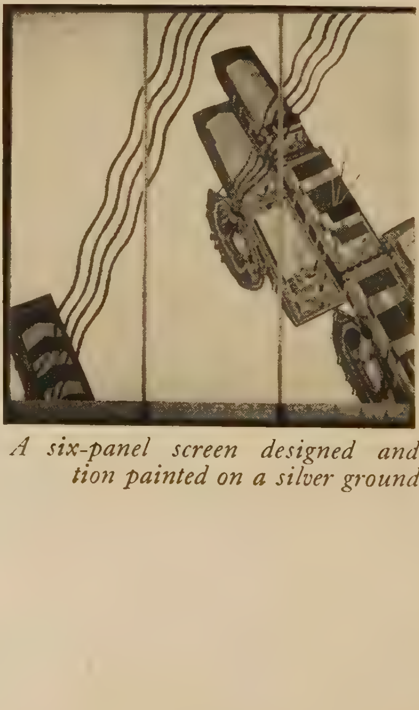


© Amemya

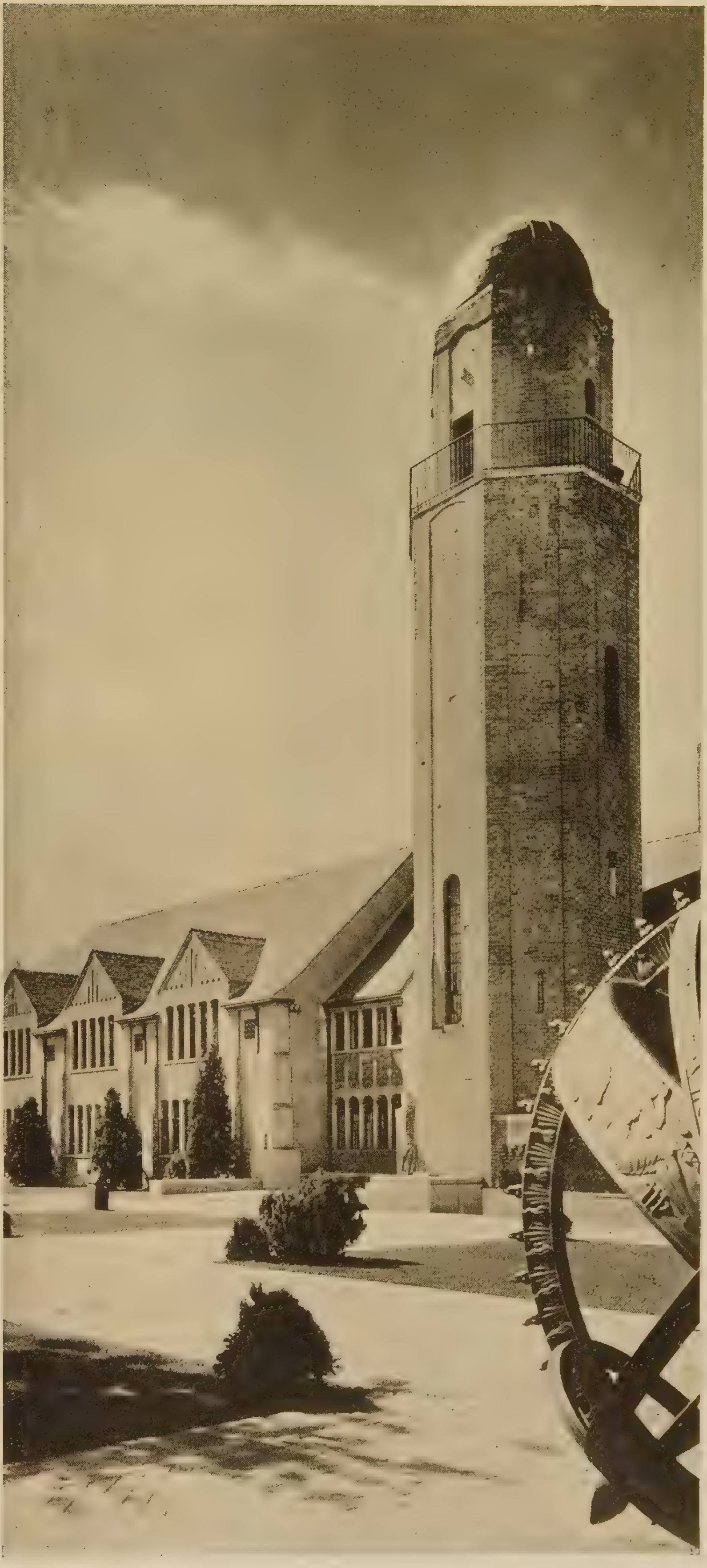
The Empire State Building, New York City, from upper Fifth Avenue, for which William F. Lamb, of Shreve, Lamb & Harmon, was awarded the Gold Medal in Architecture



Decorative figure. Wheeler Williams, sculptor

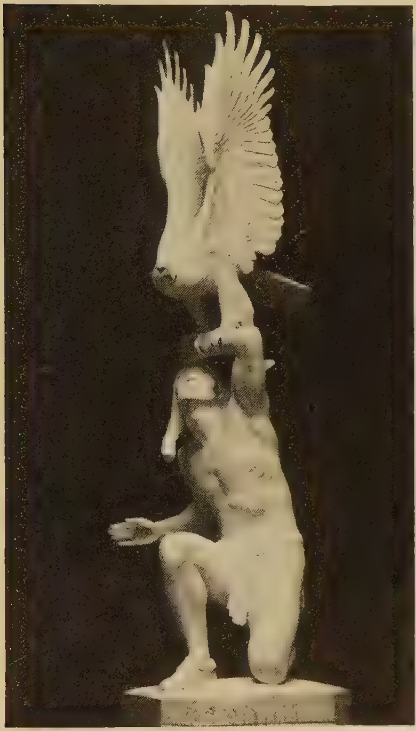


A six-panel screen designed and
tion painted on a silver ground

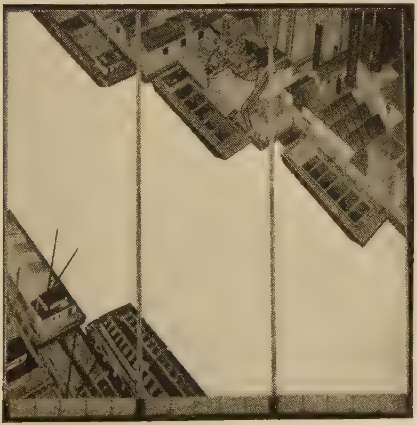


Cranbrook Boys' School, Birmingham, Mich. Academic Building and Tower. For his work in the Cranbrook Foundation Eliel Saarinen received the Gold Medal in Architecture

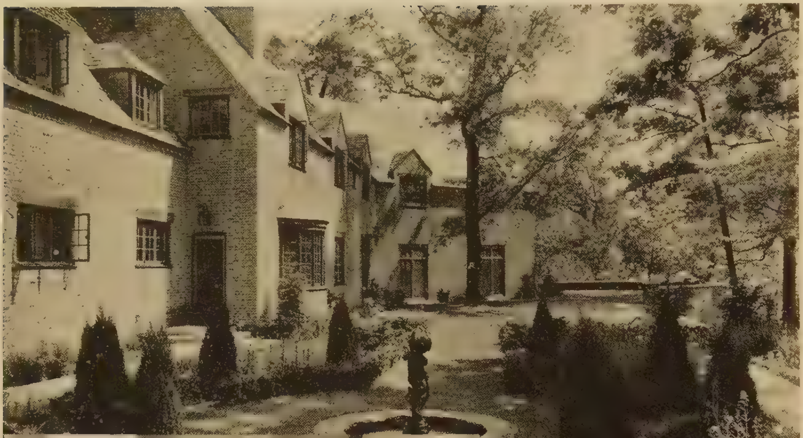
rial Survey
the
League Show



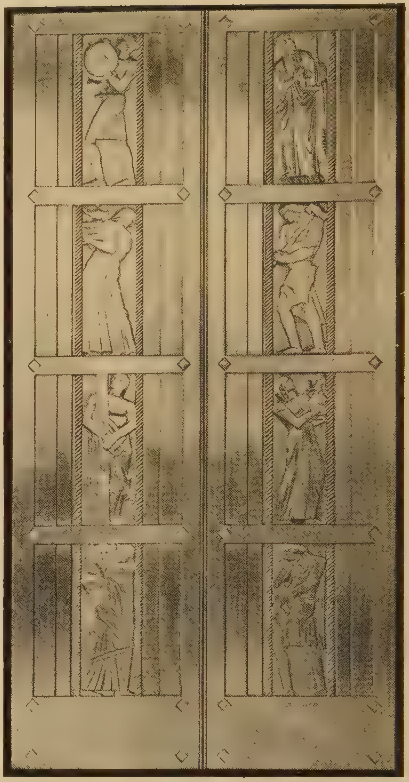
Surmounting group for Tours War Memorial. C. Paul Jennewein, sculptor



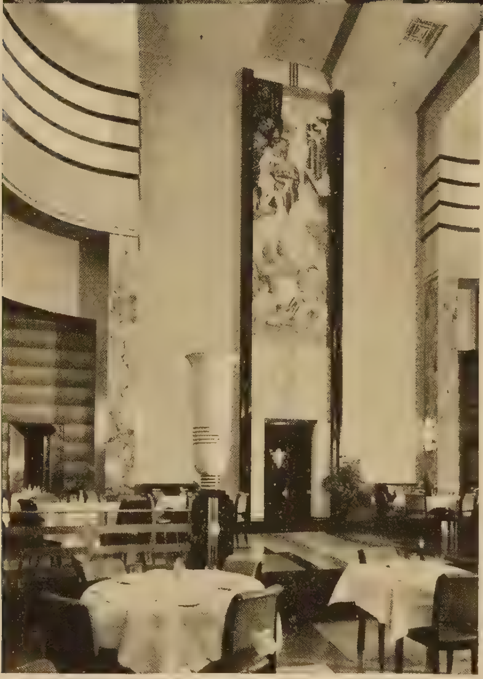
executed by Ernest Born. Decora-
with natural oak base and trim



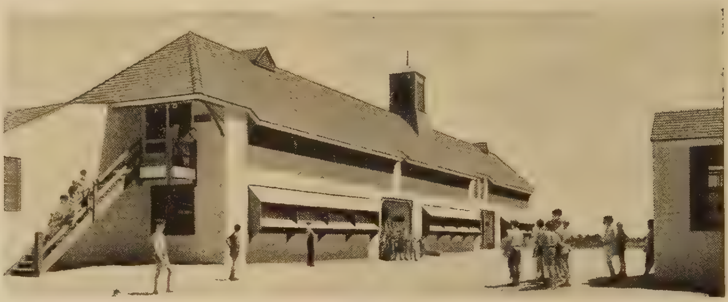
House at Dayton, Ohio. For their residential work, Peabody, Wilson & Brown received the Silver Medal in Architecture



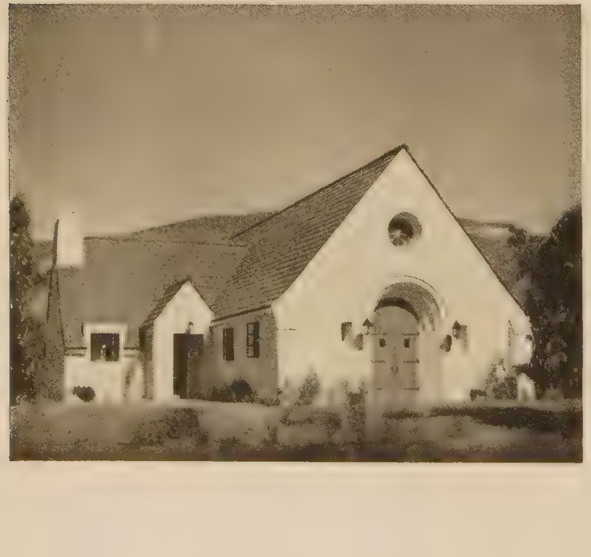
Bronze doors for South Office Building, Harrisburg, Pa. Gehron & Ross, architects. Lee Lawrie received the Gold Medal in Sculpture



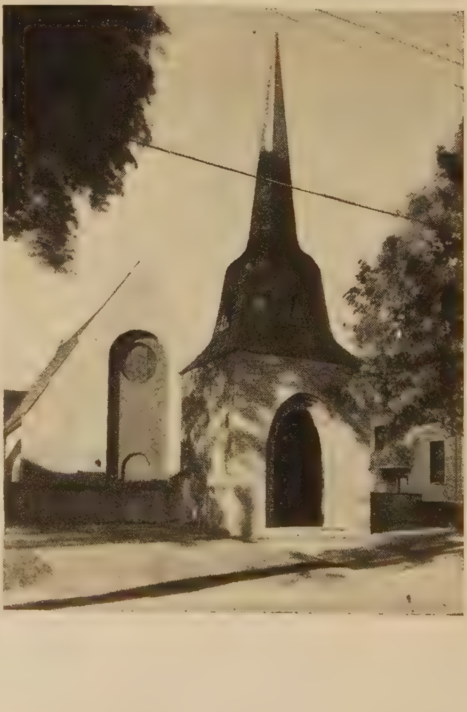
Main dining-room, Montreal store of T. Eaton & Company. Decorated by Jacques Carlu, architect; Natacha Carlu, painter



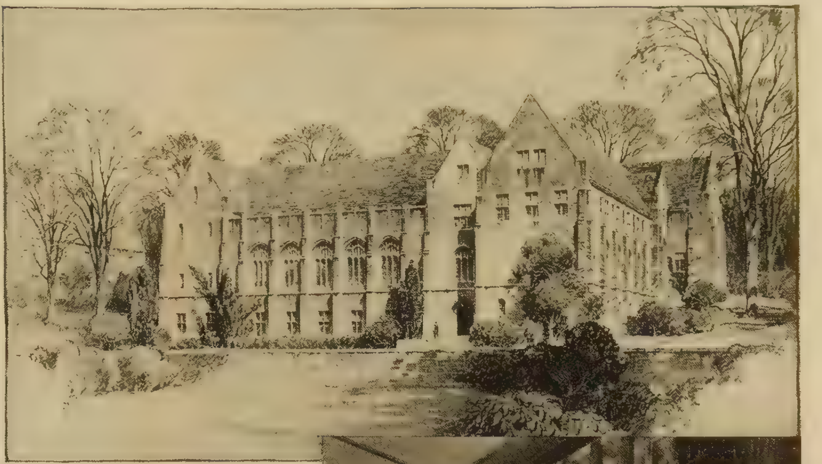
William Carey Camp of the Boys' Club of New York, Jamesport, Long Island. Howard & Frenaye, architects



First Church of Christ Scientist, Fillmore, Calif. H. Roy Kelley, architect



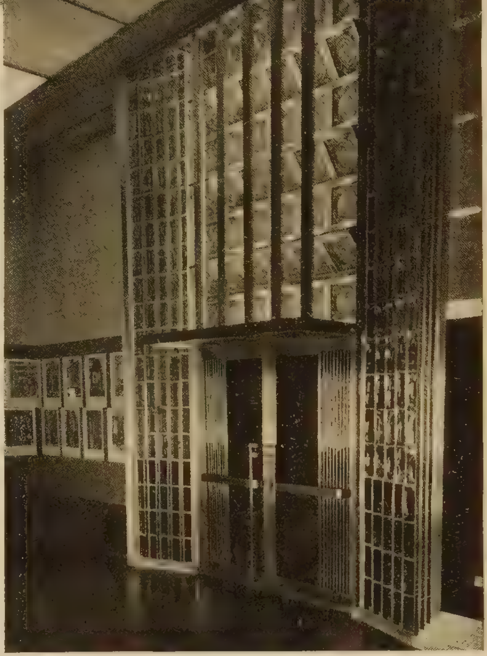
First Swedish Lutheran Church, Arlington, N. J. Martin Graveley Hedmark, architect



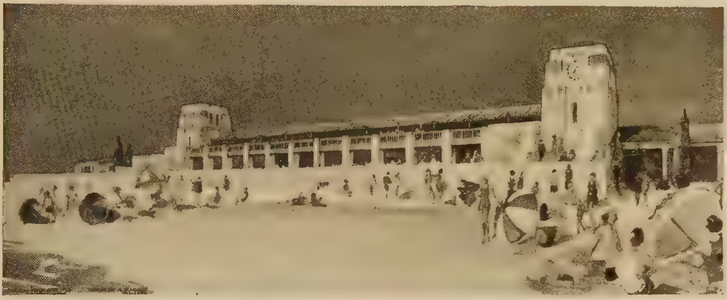
Building for Music, Cornell University, Frederick L. Ackerman, architect; drawing by Schell Lewis—Birch Burdette Long Memorial Prize

Fairchild Aerial Surveys, Inc.

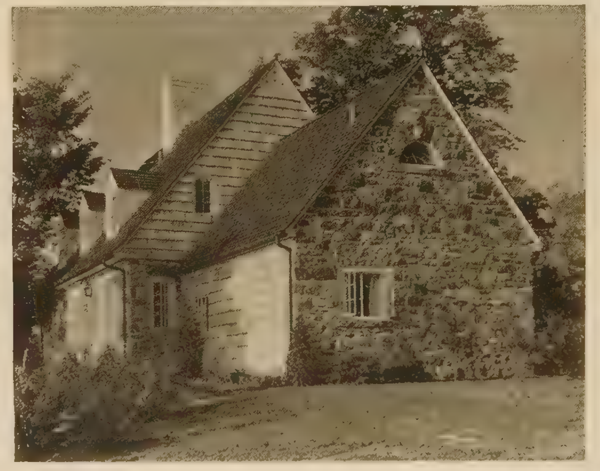
Westchester County (N. Y.) Park System. Gilmore D. Clarke, awarded the Gold Medal in Landscape Architecture



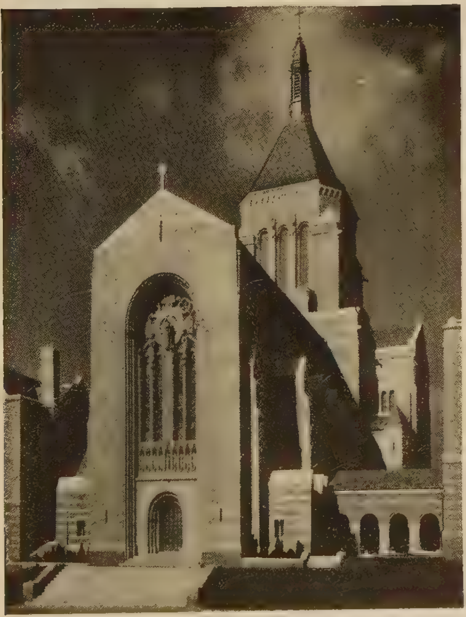
Screen and entrance, Public National Bank and Trust Company, New York City, for which Eugene Schoen received the Craftsmanship Medal



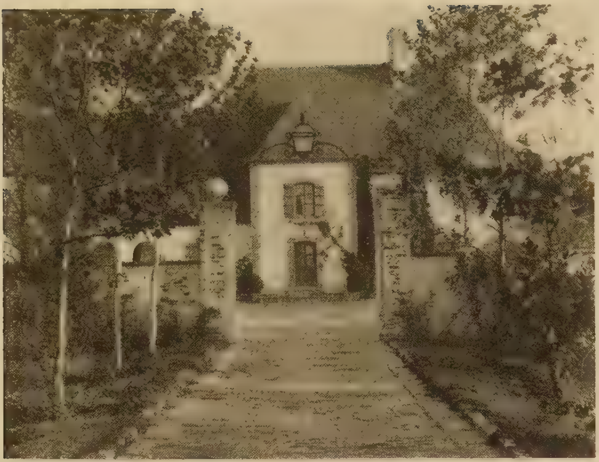
Jones Beach (Long Island) Bath House No. 1. W. Earle Andrews, architect and engineer; H. A. Magoon, designer



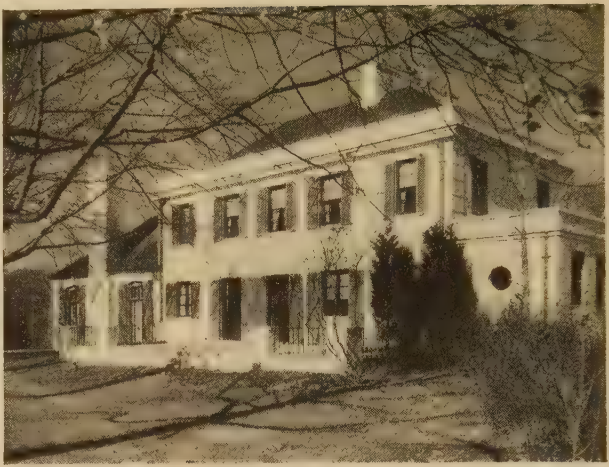
House of C. C. Wells, Norwalk, Conn. Julius Gregory, architect



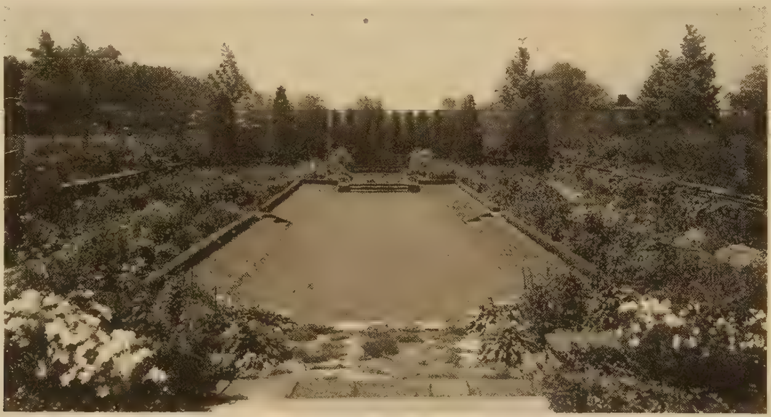
Church of the Holy Child, Philadelphia. George I. Lovatt, architect



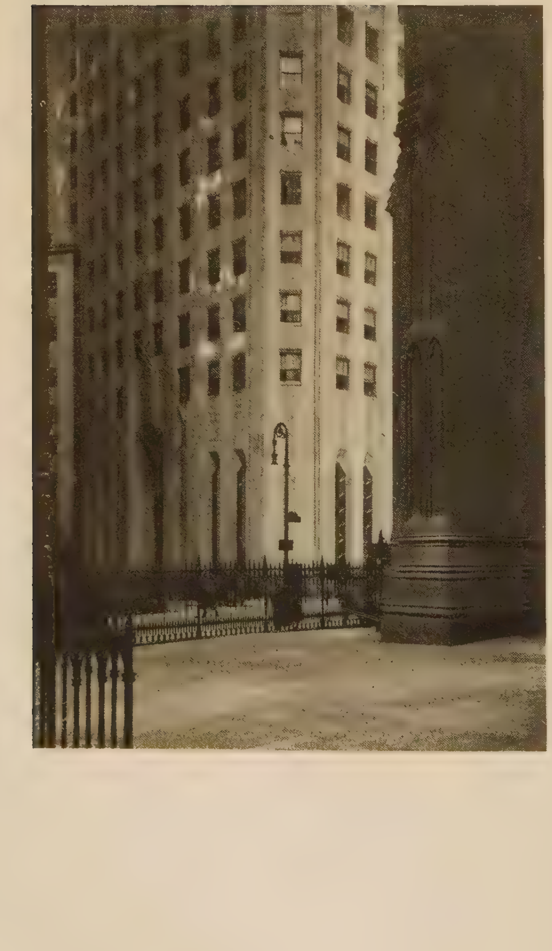
House of Douglas M. Bomeisler, Greenwich, Conn. Leigh French, Jr., and Philip Ives, architects



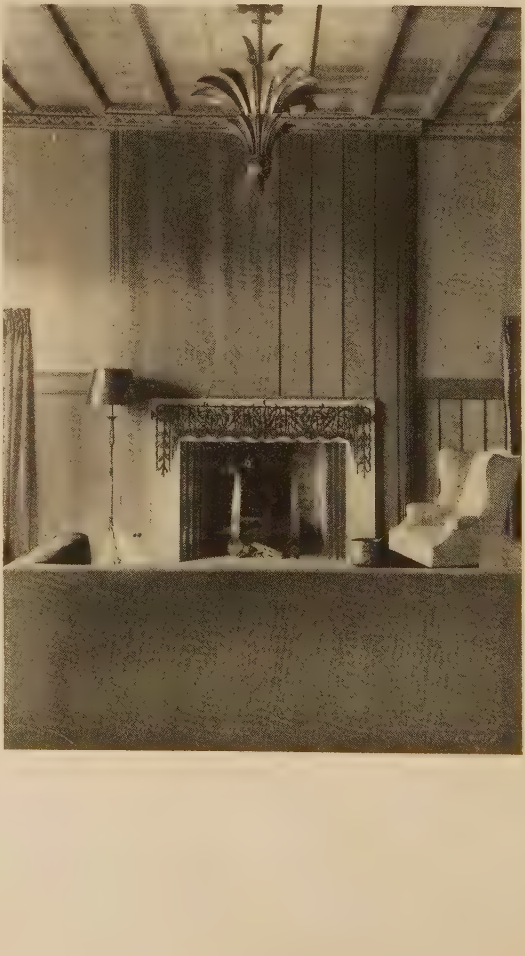
House of Morgan Jopling, Smithtown, Long Island. Robert Perry Rodgers & Alfred Easton Poor, architects



Garden of Dr. Herschel C. Walker, Wynnewood, Pa.
Thomas W. Sears, landscape architect



Detail at base of Irving Trust Company Building, 1 Wall Street, New York City. Voorhees, Gmelin & Walker, architects



Detail of living-room, house of Harold C. Strong, Croton-on-Hudson, N. Y. Harvey Stevenson, Thomas & Studds, architects

Modern Adaptation of Ancient Methods for Plan Making

By Ernest Flagg

THE best of all ways to reduce costs, whether in building automobiles or houses, is to standardize. Standardization of designs is and always must be a failure because it produces monotony. If Edison had been as great an artist as inventor he would never have advocated cast-concrete houses. Yet this objection does not apply to the standardization of *parts*, and the house is made up of parts. Parts, however, cannot be standardized under present methods, for if they are they will not fit. Special cases will constantly arise and each special case is as troublesome to make as the standard part. Moreover, it disturbs quantity production and disorganizes the system upon which economy must be based. If, for instance, there is a standard window or door, and plans are made in the ordinary way, occasion will constantly arise where the standard door or window will not fit, and a special design must be made. The only way to overcome this difficulty is by commensurability, and the only way to have commensurability is by the use of a unit. If there is a certain measure running throughout the design, as indicated in the accompanying illustration, all parts will fit, and, with comparatively little skill on the part of the planner, all things will fall into their proper positions, all axes be preserved and proportions inside and out made harmonious with certainty.

This was the method used by the ancients, and we moderns would do well to avail ourselves of their wisdom. There were other things besides literature and art in which the ancient civilization was in advance of ours.

In the process of standardization the first fruits of its beneficent influence are felt in the plans. It is far from an exaggeration to say that in the making of plans, time, labor, and cost can be reduced by at least three-quarters, and if the work is done intelligently it is not too much to say that its quality will be proportionately improved. For with scarcely any effort, the parts will arrange themselves with a degree of symmetry and order hardly found under present methods in the most carefully studied monumental building. Moreover, all dimensions will be in harmony as one sees them in Greek work, rather than in discord.

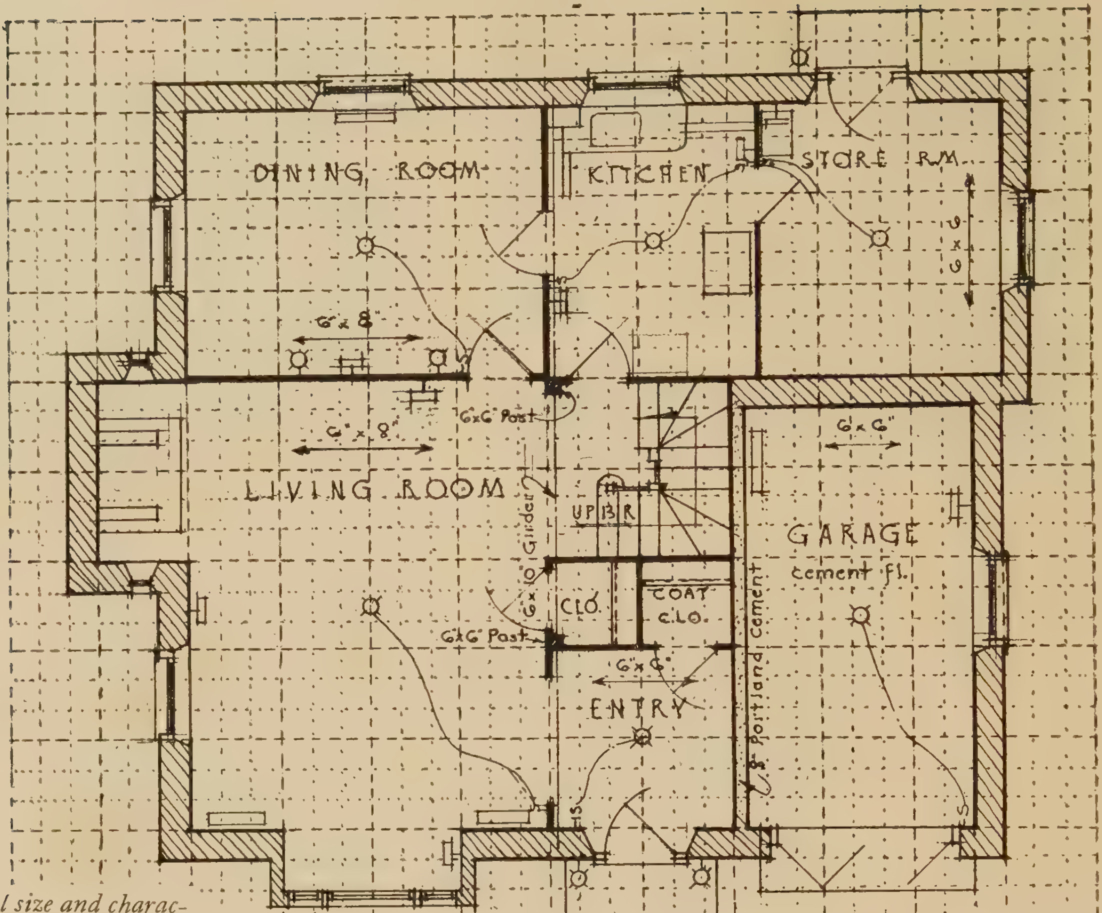
In the preceding article in this series (April) there was presented the preliminary sketch for a small house which it is proposed to illustrate in detail as a demonstration of the advantages that should accrue from standardization. We now present the working-drawing, or rather a part of it at full size. The larger squares represent the building-unit of 45″, and the smaller ones the part, 15″, also used as the module of proportion. (See preceding number.)

The complete working-drawings for a small house, exclusive of details, are usually made on a single sheet of paper ruled as indicated, the standard size of the sheet being 38 building-units wide by 49 long and measuring about 18″ x 24″.

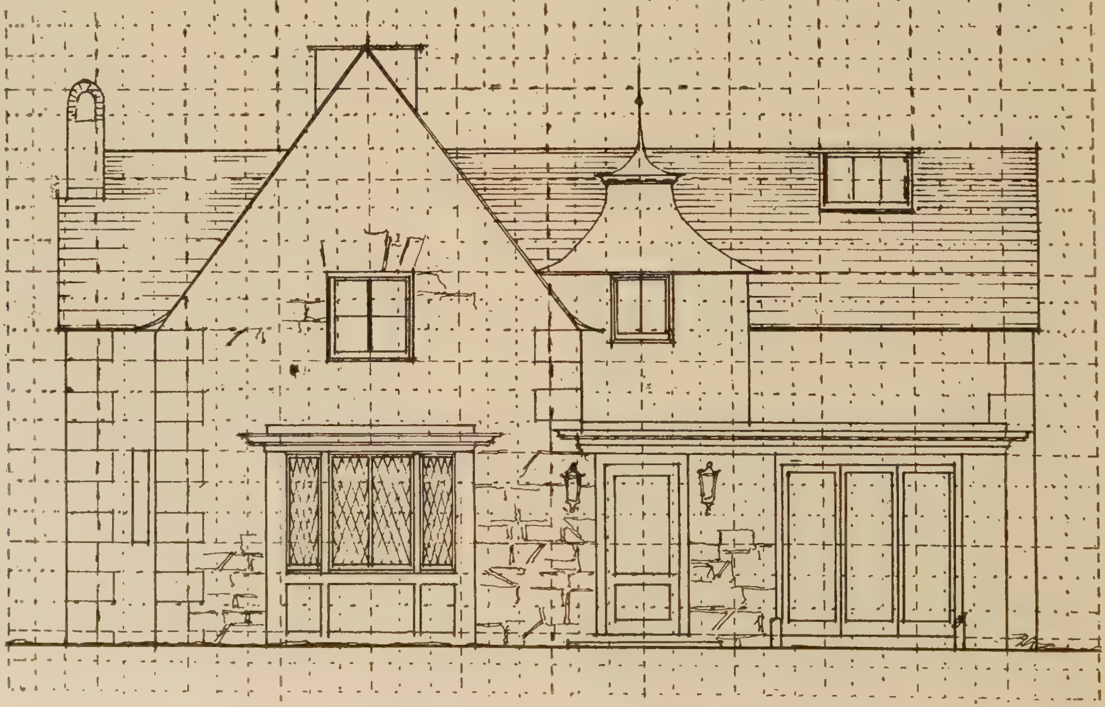
The drawings consist of plans for each floor, the four elevations, placed opposite that side of the plan to which they belong, and a section, or sometimes two. As for details, they are all standardized and *printed* on separate sheets, with a printed specification on the back of each; so it is only necessary to select those sheets which apply to the particular building.

No figured dimensions are used, either on working-drawings or details, for none are needed. Nothing is left in doubt and it is almost mistake-proof. As before remarked, a curious result of this kind of planning is that no tracing-paper is needed. Another peculiarity is that an exceedingly small scale may be used if desired, there being so little to put on the plan. The standard sheets, such as I use, produce drawings at an eighth-inch scale, but if it were not for Building Departments which require drawings of the kind they are accustomed to, a sixteenth-inch scale would answer equally well. This shows how it was possible for the ancients to build great structures by means of plans made on what we would consider mere scraps of paper.

I once tried myself in making working-drawings from the preliminary sketch for a house costing about $15,000, and found that I could do it all, except for the indication of the heating, lighting, and plumbing, in about three hours. If I had been used to such work I have no doubt less time would have been required. The last plan which I made for a low-priced house by the old method was about thirty years ago. When the work was finished I found that



This is the actual size and character of working-drawings, under this system. No dimensions are necessary, as each of the smaller squares is 15″ at ⅛-inch scale. Standard detail sheets (see page 350) give other needed information to the builder



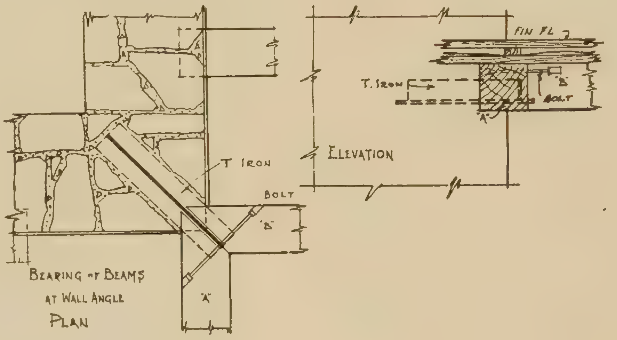
it had cost me about $600 more than the ten per cent commission which I charged, so the upshot was that besides a great deal of time and worry, I had made the client a present of $600, for which he was far from grateful.

To do a similar amount of work now, superintendence excluded, would take from one to two hours of my own time for the preliminary sketch and not more than one day's time of a draftsman, and the fee at two and one-half per cent which I charge would amount to $500. Moreover, both I and the client are likely to be better pleased by the arrangement.

One can hardly use this method of planmaking long without discovering many ways by which construction can be simplified, reduced in cost, and improved in quality. Let us consider ceilings, for example, using as an illustration the one for the ground floor of the house whose plan is herewith given. It is supposed to consist of exposed 6″ x 6″ beams spaced on units and half units(*i. e.,* 22½″ on centres). The face of the underfloor, of tongued-and-grooved material, is turned down to form the ceiling; on this is placed the deafening. The upper floor is fastened to 1″ x 2″ strips simply laid on the deafening, care being taken that floor nails do not penetrate the ceiling and so transmit sound. It will be seen, therefore, that the upper floor floats, so to speak, on the deafening and that there is a one-inch space between it and the underfloor, or more properly between floor and ceiling, in which to run electric conduits. No more wood is required than in ordinary construction, but it must be of a better quality and more carefully worked. The extra cost involved is more than offset by the saving of the plastered ceiling, to say nothing of the space gained between the beams, which counts in the height of rooms. By ordinary methods floor thickness is about 12″, whereas here it is only 3″, and the appearance of the wooden ceiling to most persons is more pleasing than a plastered one.

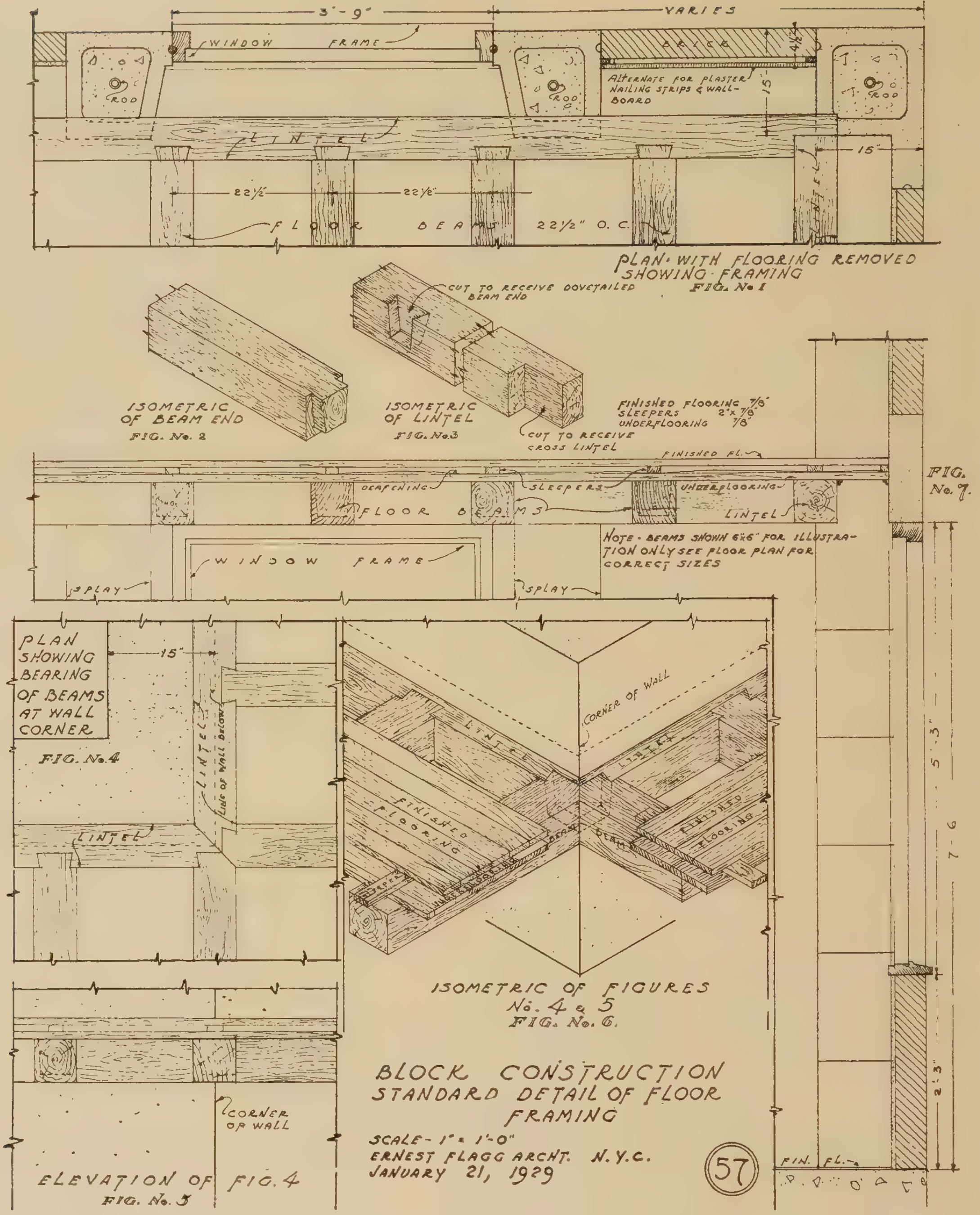
The material which I have found most suitable is long-leaf all-heart Georgia pine, kiln dried. No stain or filler is used, the wood being simply waxed, in which condition it will constantly improve in appearance with age, and, though becoming darker, always retain its brilliancy.

One not accustomed to use ceilings of this kind is often tempted, when any seeming difficulty arises, to abandon the regular spacing (*i. e.,* the unit) at certain places, but to do so is to fall into a delusion and a snare, for in trying to overcome one difficulty in this way a dozen others crop up. The system should be rigidly adhered to, be the trouble what it may, for it will certainly be less than that caused by complete disorganization. The chief difficulty is usually at re-entrant angles, such as shown in Fig. 6 of the detail sheet. In such places a beam and a girder may meet with no apparent bearing. In this detail sheet, for use with block wall construction (to be described in the next instalment), beams are simply mortised into wall plates; but with a different type of construction different treatment is necessary, as shown in the detail herewith. Here a small piece of T-iron is built into the wall, forming a concealed bracket as a seat for the beams.



One great advantage of a system of this kind is that a problem once solved stays solved. As everything is systematized and standardized, the workman soon learns all difficulties likely to occur and just how to meet them. Although the design may vary *ad infinitum,* conditions in the use of the standardized parts remain constant, so that once having learned the method he can proceed with speed and certainty, not having to stop and work out new and constantly arising problems, as is necessary when using common methods where there is no standardized procedure and where special conditions present themselves at every turn.

But to return to our ceiling: Some may object to the appearance of sheathing between beams, and if so a cheaper quality of stuff may be used for underflooring, covered on its underside by one of the excellent wall boards now on the market. The beams form panels and as the wall boards come in long lengths they can be shown without joints. When used in this way it is best to lay the wall board on the beams before the underfloor, for if fitted in from the underside after the underfloor is in place, more labor is required and the nailing will show un-

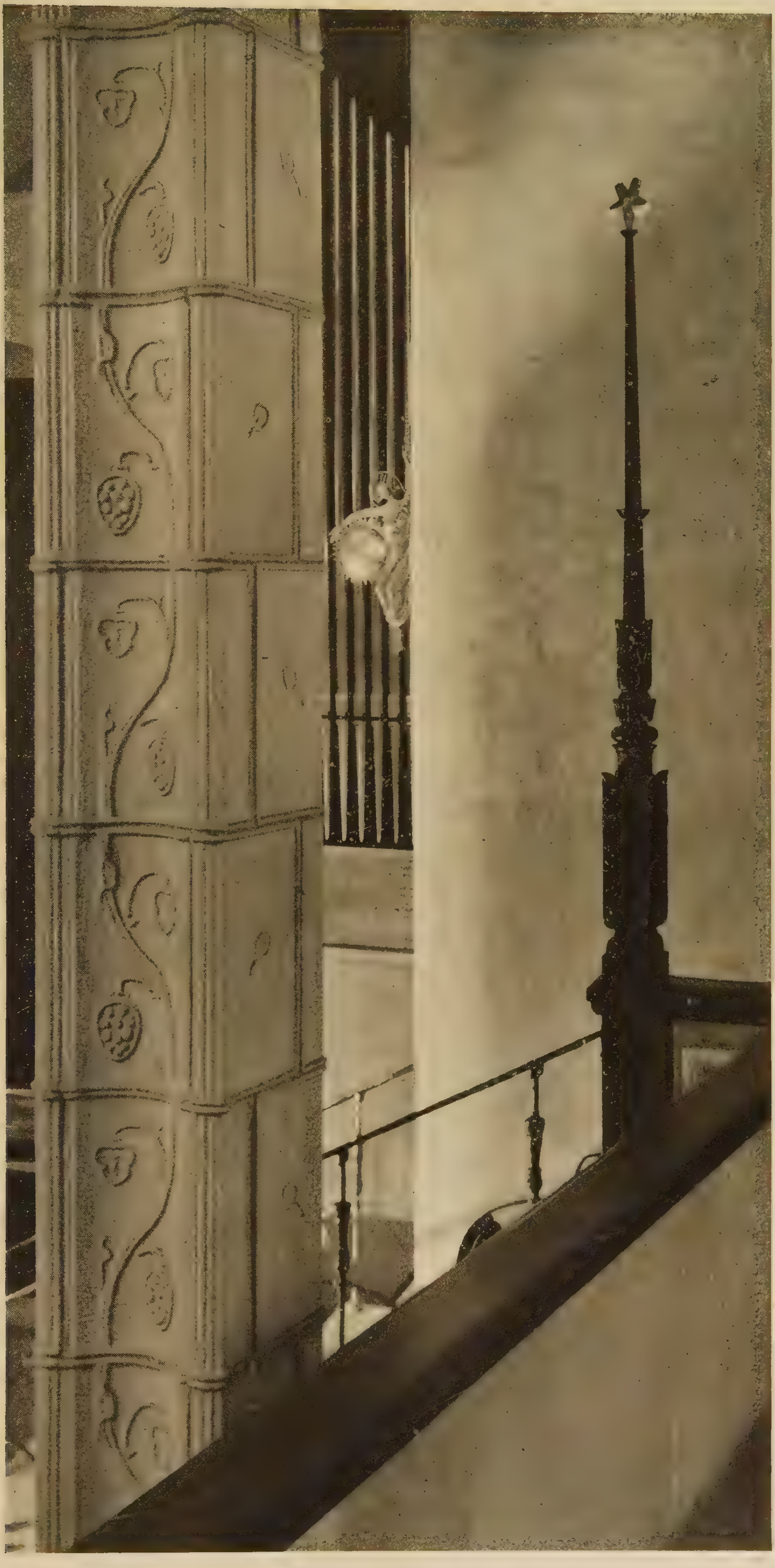


On the back of the standard detail sheets, one of which is here reproduced at half size, all necessary instructions as to materials and methods of execution are printed.

For example, over the ceiling boards are laid, not nailed, the building paper and furring strips, the upper flooring being nailed to but not through the strips.

less covered by mouldings, which add to cost.

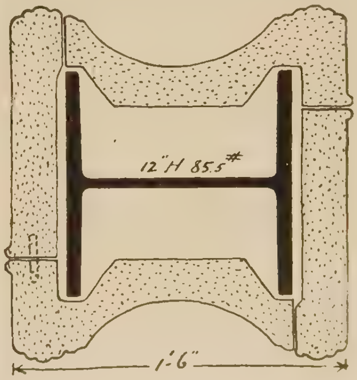
To lay out and construct a beam ceiling under ordinary procedure is troublesome and expensive. Sham beams are generally used and such ceilings are found only in expensive houses, where they are offensive to any one of sufficient taste to admire honesty and truth in construction. A glance at the plan, page 348, will show that when the system herein advocated is used ceilings plan themselves, one may say. Axes and symmetry are maintained almost automatically, as in all other parts of the structure, and the whole building bespeaks forethought and study, which is a mark of intelligence and a delight to persons of refined sensibilities, for it is the embodiment of order and harmony, obtained nevertheless with greater ease and at less expense than commonly required for productions which by no stretch of the imagination can be considered works of art.

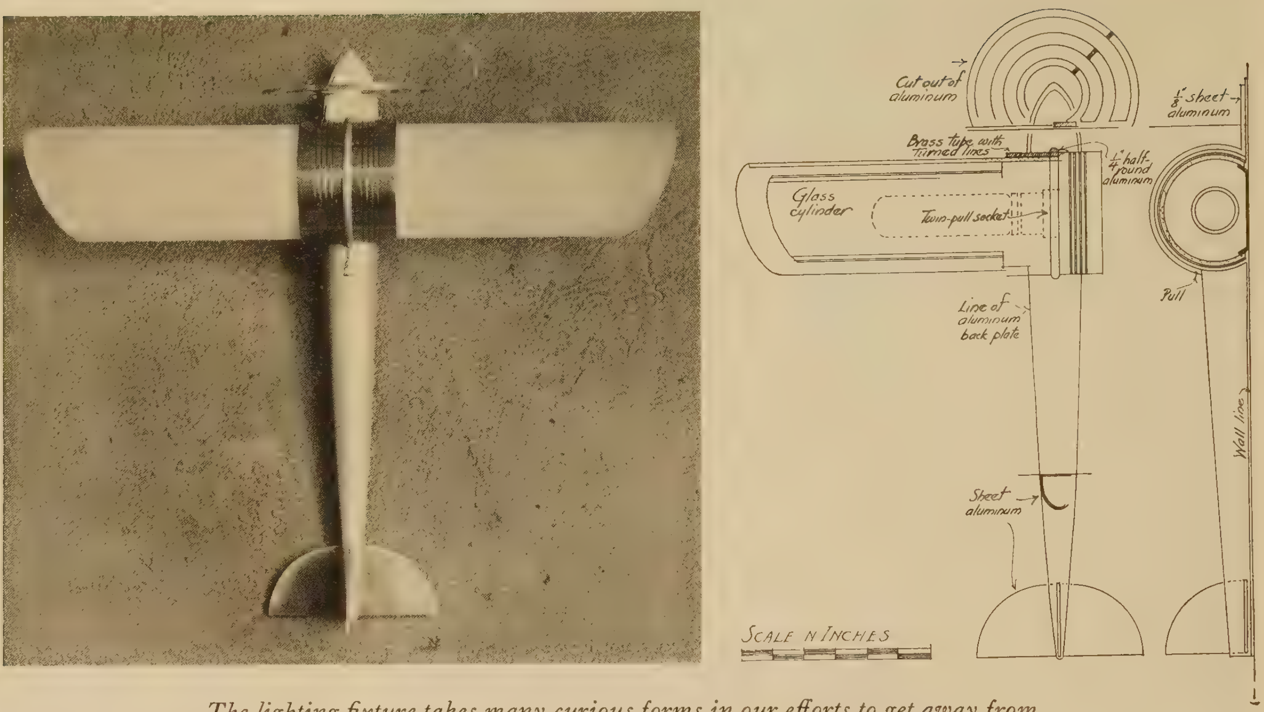


The Editor's Sketch Book

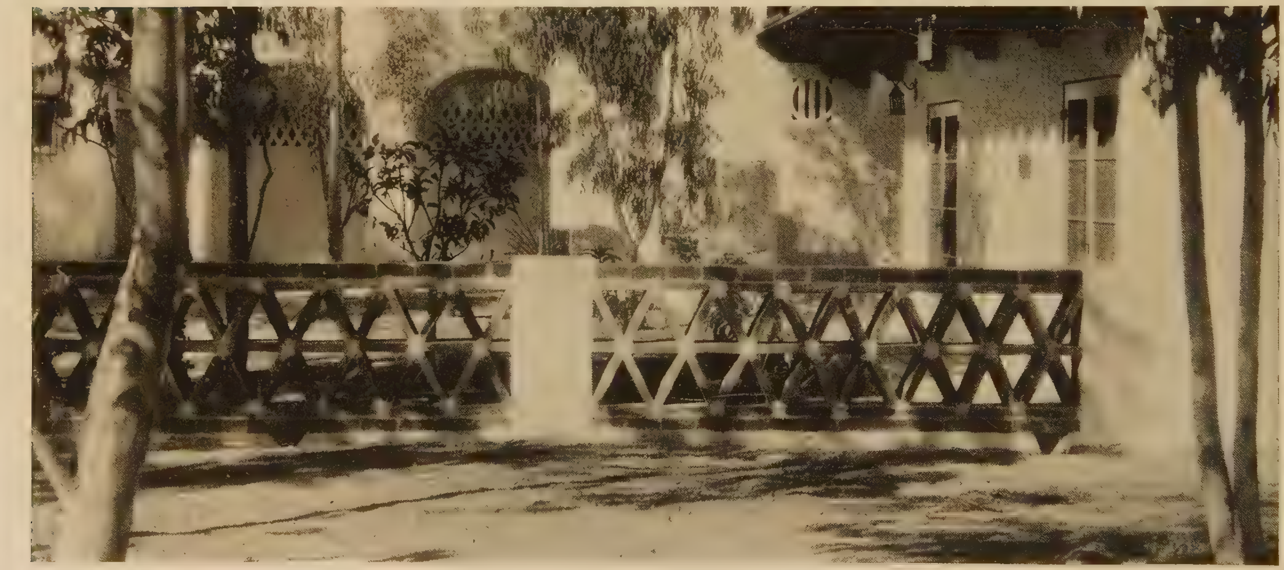
THESE pages are inaugurated for occasional appearance with the thought that there should be a place in the magazine for recording some of the unusual and ingenious ways of solving minor problems. As we travel about, seeing new work, it is frequently the solution of some minor detail that catches our attention, often to the exclusion of the work as a whole.

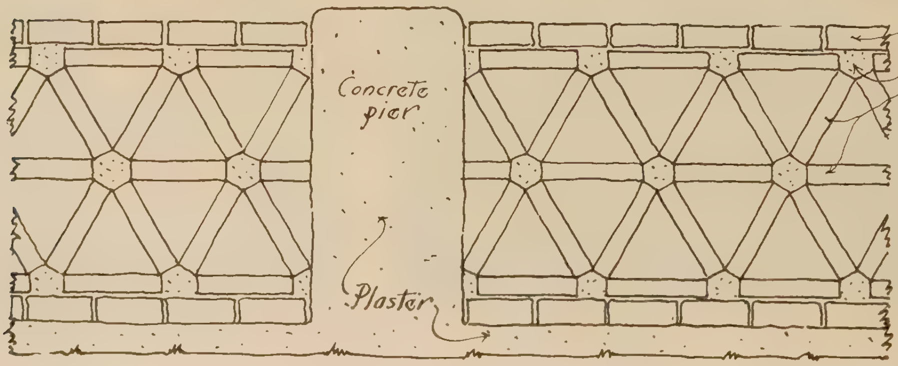
In the new Swedish Baptist Church, New York City, Martin Hedmark developed what seemed to us an unusually clever terra-cotta envelope for the steel columns, expressing as they do something of the H-section inside





The lighting fixture takes many curious forms in our efforts to get away from imitating the candle. Here is a side-wall fixture which Walter Kantack designed for the Chance Vought Aeroplane Corporation at East Hartford, Conn.





An interesting attempt on the part of Lilian J. Rice at Rancho Santa Fe, Calif., to strike the happy medium between solids and voids in a terrace wall

NUMBER XIII

IN A SERIES

OF

Working Drawings

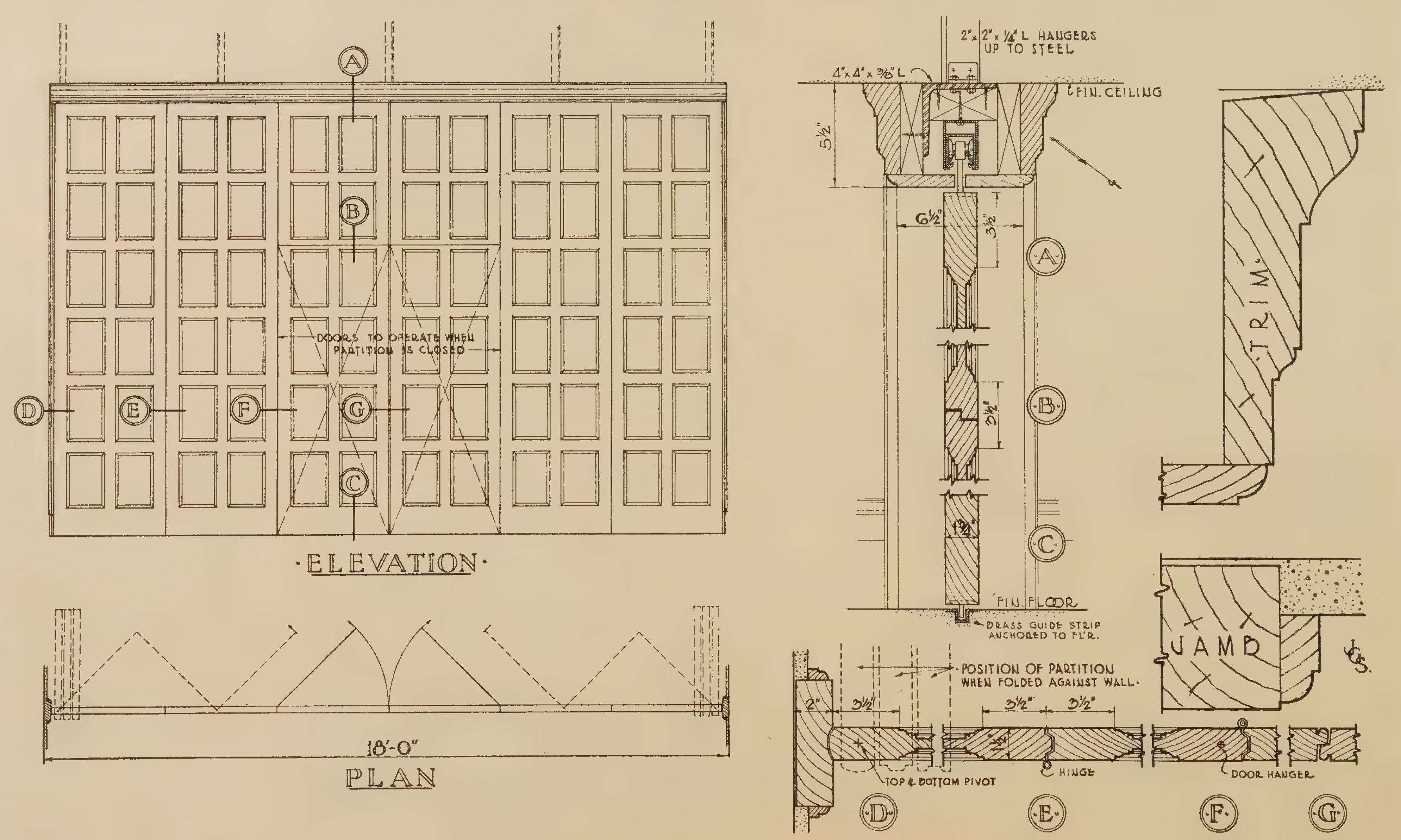
By Jack G. Stewart

This series, in which one drawing will appear each month, is designed to cover the smaller practical problems that confront the architect in his day's work. The subjects chosen are those which, while not uncommon, call for some experience and knowledge of approved solutions. Next month the subject is a Counterbalanced Door for a Dumb-waiter.

ARCHITECTURE
CHARLES SCRIBNER'S SONS

PREVIOUS SUBJECTS IN THIS SERIES

I. Flagpole Holder on an Exterior Wall
II. Radiator Enclosures
III. Cigar Sales Counter
IV. Woodwork in a Library
V. Built-in Kitchen Cupboard
VI. Various Trims and Mouldings
VII. Telephone Booth
VIII. Men's Toilet
IX. Window Spandrels
X. Circular Stair for a Residence
XI. Detail of Metal Stair Construction
XII. Detail of Elevator Construction

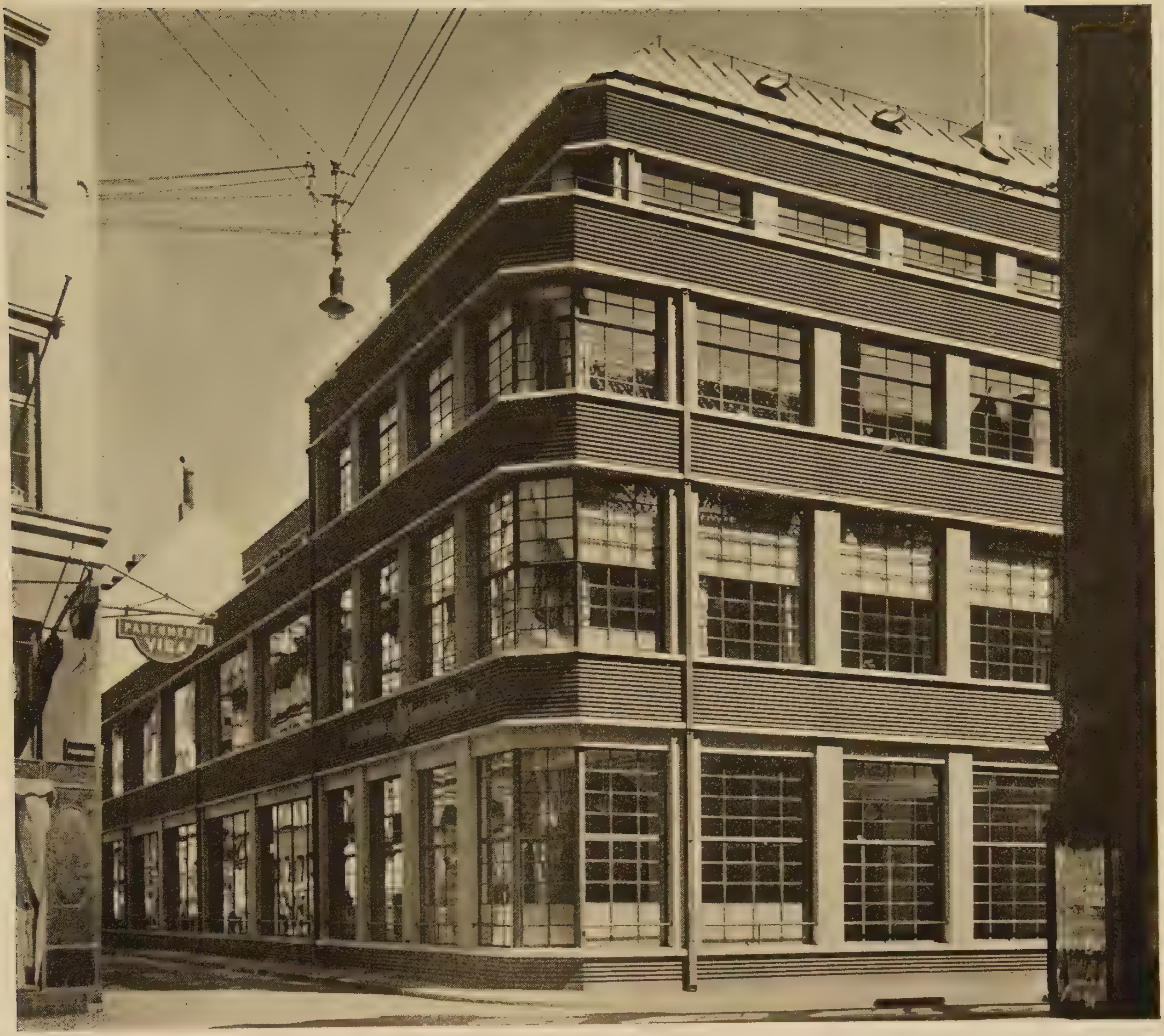


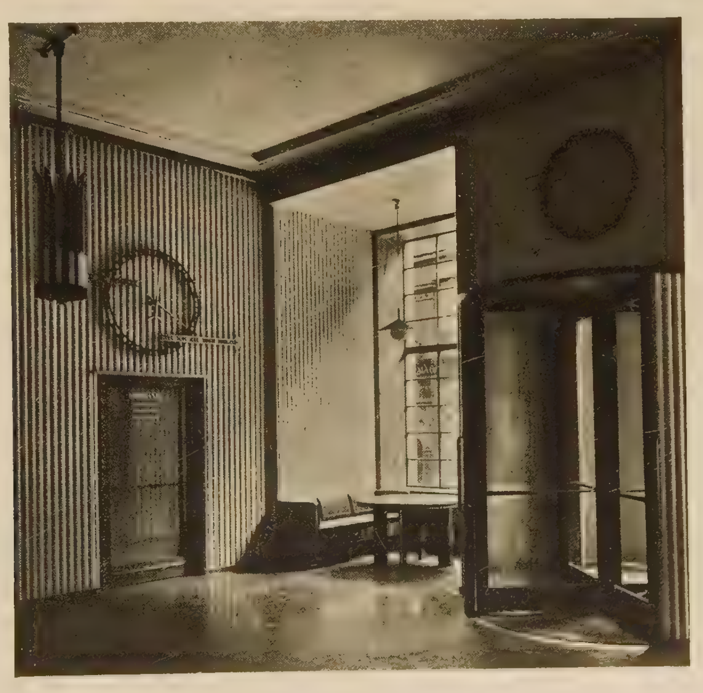
A
B
C
D
E
F
G
DOORS TO OPERATE WHEN PARTITION IS CLOSED
·ELEVATION·
18'-0"
PLAN
2"x2"x¼"L HANGERS UP TO STEEL
4"x4"x⅜"L
FIN. CEILING
5½"
6½"
3½"
3½"
1¾"
FIN. FLOOR
BRASS GUIDE STRIP ANCHORED TO FL'R.
·TRIM·
JAMB
POSITION OF PARTITION WHEN FOLDED AGAINST WALL.
2"
3½"
3½"
3½"
TOP & BOTTOM PIVOT
HINGE
DOOR HANGER
JCS.

·DETAIL·OF·FOLDING·PARTITION·

·SCALE: ¼"-1½"-6"=1'-0".

·PLATE·No·13·

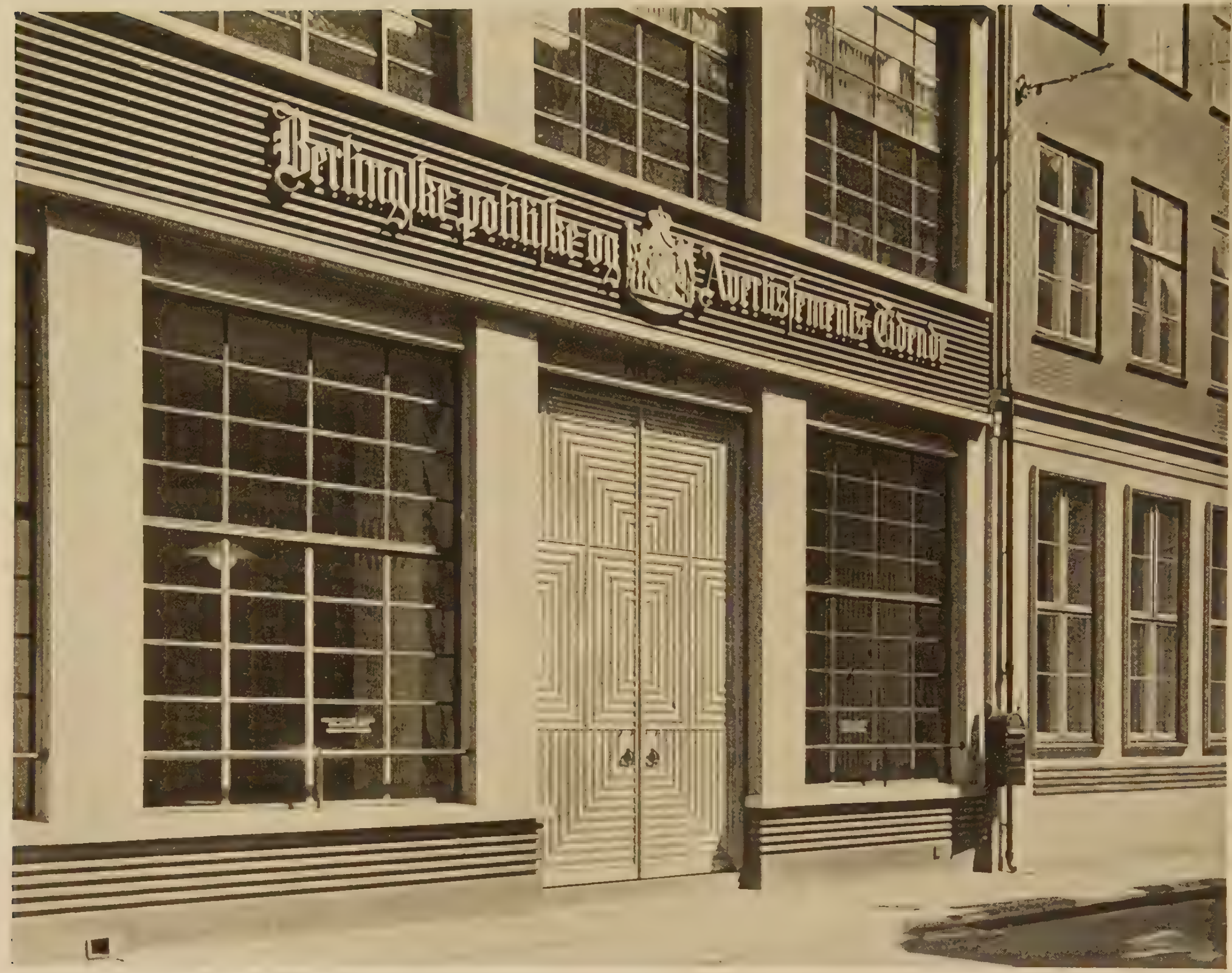




NEWSPAPER BUILDING IN COPENHAGEN—BERLINGSKE TIDENDE

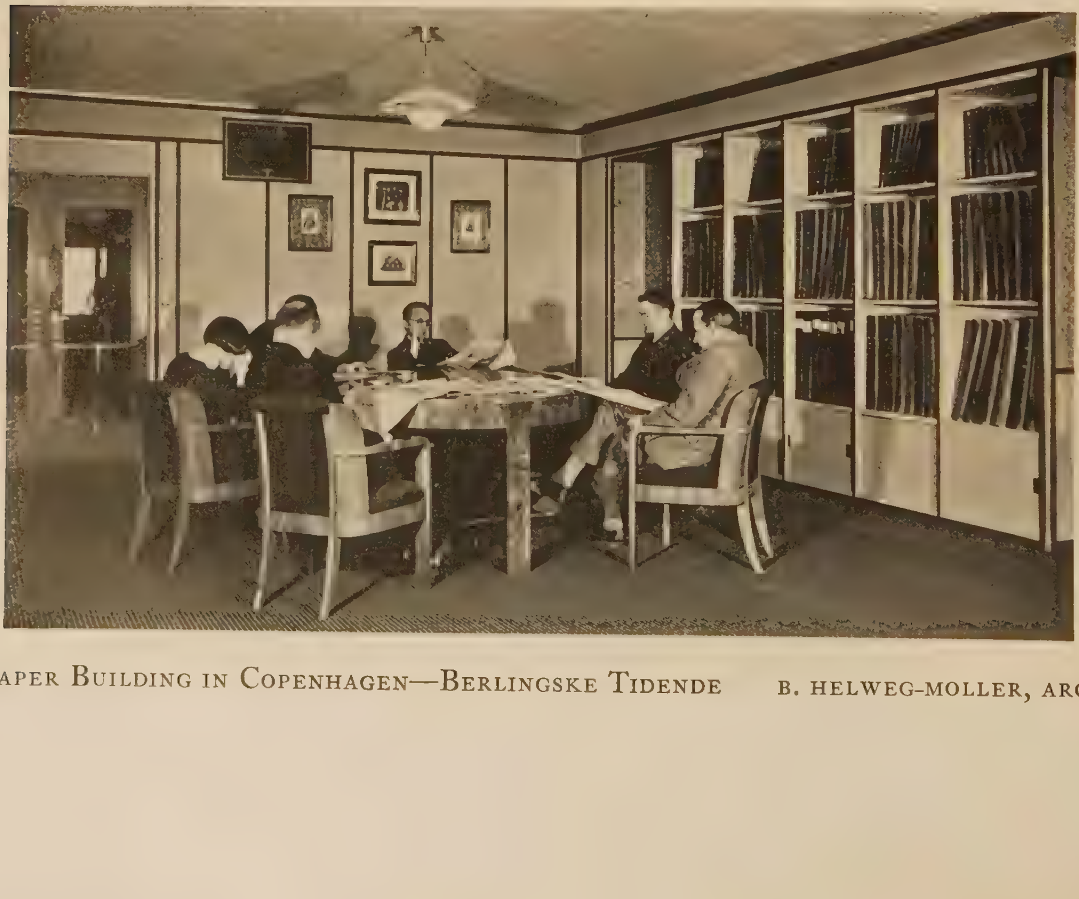
B. HELWEG-MOLLER, ARCHITECT

Built of reinforced concrete in light gray and dark gray. At left, the entrance lobby



Detail of entrance

Editorial conference room



Newspaper Building in Copenhagen—Berlingske Tidende B. HELWEG-MOLLER, ARCHITECT

Some Pitfalls in Supervision

By W. F. Bartels

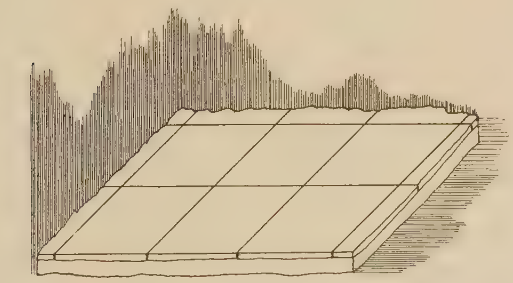
XI. FLOORS, *CONTINUED*

Cement Floors

Cement floors should have a base which will be strong enough to carry the "finish" without causing it to crack, and on sidewalks it should be deep and heavy enough to withstand frost and the elements. The base should be well tamped down to a solid mass. Where pipes or conduits run in the base, they should have wire mesh run over them to prevent the finish from cracking.

While it is advisable to check up on the material going into the top or finish coat, cheating on this will seldom be found. Skimping on the cement will cause the slowing up of the work. The material does not slide as easily and tires the men out more quickly. This loss in labor greatly exceeds the small saving effected in cement.

The trowelling, however, of the finish or top coat is very important and should be carefully watched. A few soft trowellings may show a fine finish, but it is not to be compared to work where three or four trowellings and real effort are put in the work; the soft trowelling will not eliminate the small lumps and air bubbles. Since the longevity of the floor depends to a considerable extent on its trowelling, there is every necessity for close inspection. Of course no dry cement should be sprinkled on during trowelling, as this will subsequently cause the surface to dust and flake. Where patterns are laid out the joints for these should not be mere surface marks but should be cut through to the base. Failure to compel the finisher to do this often results in a crack near the artificial joint. Where a sidewalk meets a masonry structure an open joint should be left which may be filled with an elastic cement to prevent the bulging of the surface when it expands. Hardeners and anti-freeze solutions should be allowed only when they are of recognized merit and then only in strict accordance with the manufacturers' directions.



Where joints are simulated in a cement floor, see that the scorings are cut through to the base

Powders for various purposes are generally mixed with the finish but some are also sprinkled on before trowelling. In such cases, no doubt should exist as to whether or not they were adequately trowelled in.

Where aggregates, such as those for non-slip purposes, are used, they should be in such quantity as prescribed by the manufacturer, generally about one-quarter pound to the square foot.

Finally, cement work should be cured and not left to the mercy of the elements. Neither rain nor sun should be permitted to beat down upon it. After being well set it should be sprinkled occasionally to prevent cracks caused by the surface drying out faster than the bottom.

Tile Work

If for no other reason than to help the campaign for Simplified Practice, the architect should insist that all the tile coming on the job should be labelled according to the Simplified Practice recommendations of the Department of Commerce. He will thus make inspection easier for himself, as well as being able to assure his client that he is getting what is being paid for. The "bootleg" tile dealer will not want to deliver marked tile because it will at once be apparent what kind he is supplying. The U. S. Department of Commerce recommends a pink paper with the words "Selected Grade" stamped on it, and a yellow paper with "Commercial Grade" for the mounting papers of these grades of floor tile. The recommended specifications for these grades may readily be obtained from booklet No. 61, U. S. Department of Commerce. After the grade has been settled upon, the important matter is to get the tiles laid well and true. This of course depends on the individual workman, but the superintendent must see that the bed for the tile is satisfactory, that the lines of the tile run at the proper angles with the wall, and that there is no waviness in the floor, particularly around water-closet bowls.

Terrazzo Floors

Terrazzo's popularity is partially due to the ease with which it lends itself to designs and color effects and its lesser cost than that of marble. As is well known, it is made of marble chips mixed with either white or regular Portland cement, and laid on a cement underfloor previously prepared.

The base or screed coat is generally a 1 : 4 mixture of cement and sand. While this is still soft the brass strips are located according to the architect's drawing. The gauge of these strips should be checked, as well as a careful inspection given to see that the strips fit closely where they abut. It is also advisable to check the design at this time. Wherever the terrazzo is to meet another material, such as a cement floor, a strip of brass should be put along that line to effect a clean-looking joint. The screed coat should not be allowed to become too dry before the terrazzo finish is laid. Some small holes should be made in the base or screed coat so the terrazzo will have an additional opportunity of bonding.

In producing the terrazzo coat the marble chips will be mixed according to the specification, as to the variety of colors and the proportion of the sizes. After being laid and while wet, the surface is compressed with a heavy roller. When thoroughly set the surface is ground down. However, the contractor should not be allowed to do this too soon. When the surface is finally rolled and floated smooth the very top of it is largely cement. When this is set for a long time it becomes extremely hard —hence the contractor's haste to grind the terrazzo as soon as he can. Too early grinding often pulls up the small chips, leaving a surface difficult to patch and one likely to show defects shortly after. The stipulation of the specification that a fine grit be used for the finish should be enforced, otherwise the surface may not be as smooth as it is capable of being.

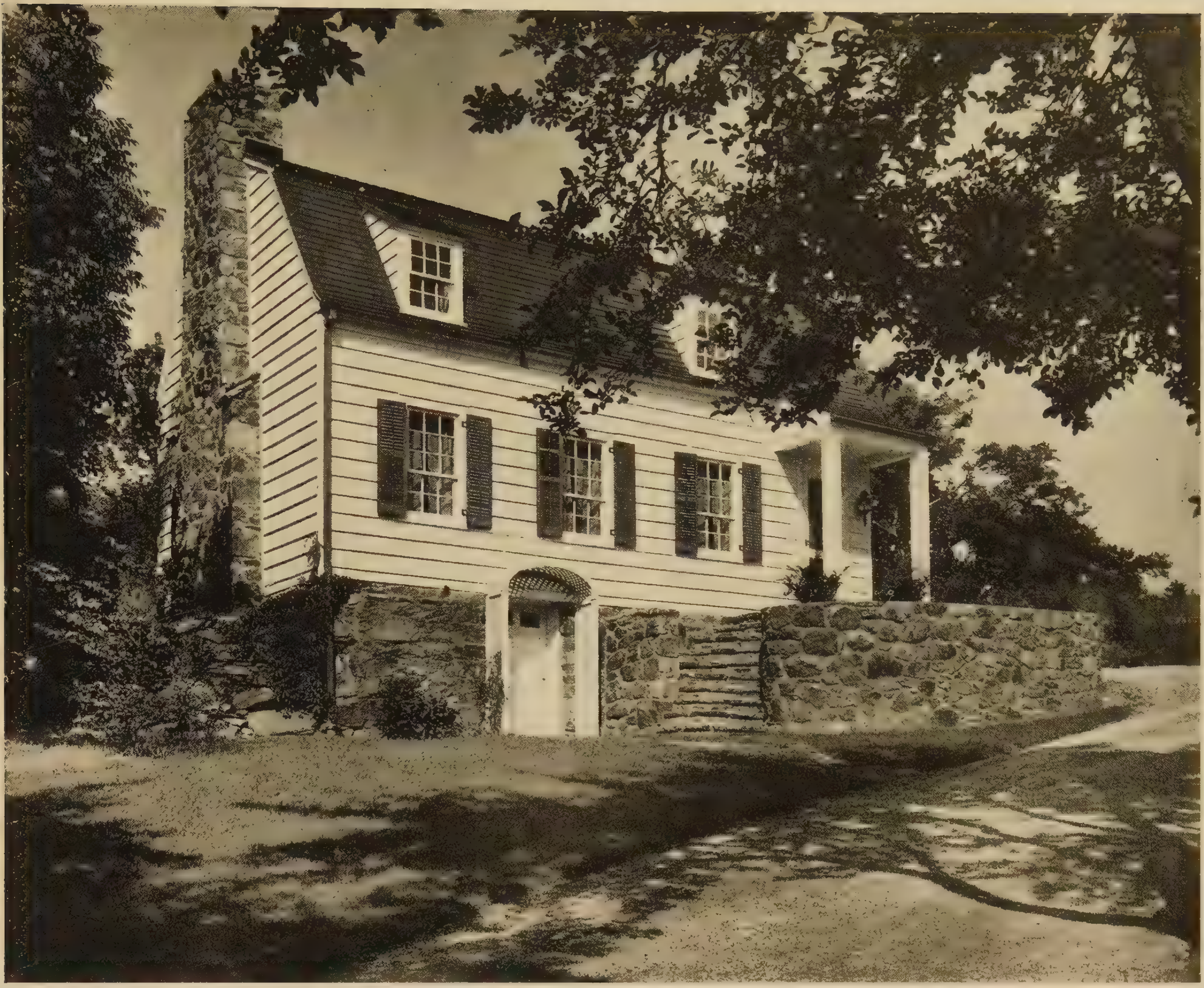
When the terrazzo floor is turned over to the owner he is often disappointed with it because it seems to have a thin translucent coat or bloom on it. This, however, is quickly removed by the shoe leather polishing it will get from pedestrians. Should it be desired to hasten its removal there is a very satisfactory compound for this purpose made of vegetable oils. This material is also used for cleaning terrazzo and is very efficient in this respect. An anti-slip quality in terrazzo can be secured by putting in some such aggregate as alundum.

Marble Floors

Marble floors require great care in their laying. How often one notices a slight "clink" in stepping on a section of a marble floor. While this is due to a loose piece of marble, it is often the result of a poor bedding. The pieces of marble should be whole when laid, and careful inspection made of the bed on which they are placed. Of course, the more veins in a marble slab, the more vigilant the superintendent must be to see that the marble is not glued together at the veins.

Linoleum Floors

While the laying of linoleum floors is relatively simple, care must be exercised to see that the grade called for is obtained. Unfortunately, the manufacturers make practically the same patterns or designs in various grades, thus causing the superintendent to keep his eyes doubly active. The linoleum should not be allowed to be unrolled except in a warm temperature, otherwise cracks will result later. The floor to be covered should be clean and dry. A regular linoleum paste should be employed to hold the linoleum down, and it should finally be rolled with a beam roller to give smoothness and as assurance that the paste is adhering to both linoleum and floor.

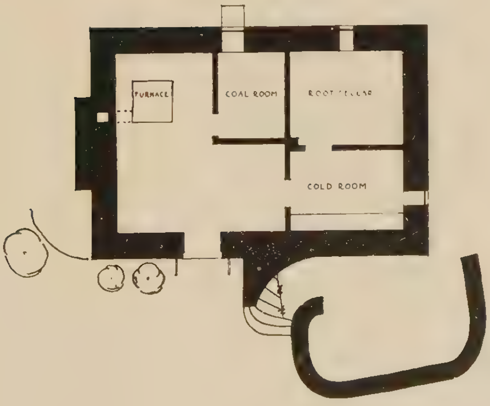


Photographs by Harold Haliday Costain

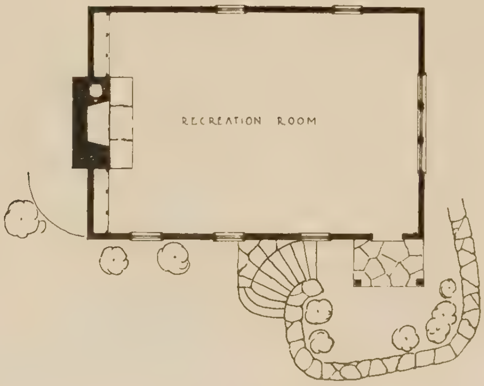
RECREATION COTTAGE ON THE ESTATE OF WILBERT WARD, OSSINING, N. Y.

ROBERT WISEMAN, ARCHITECT

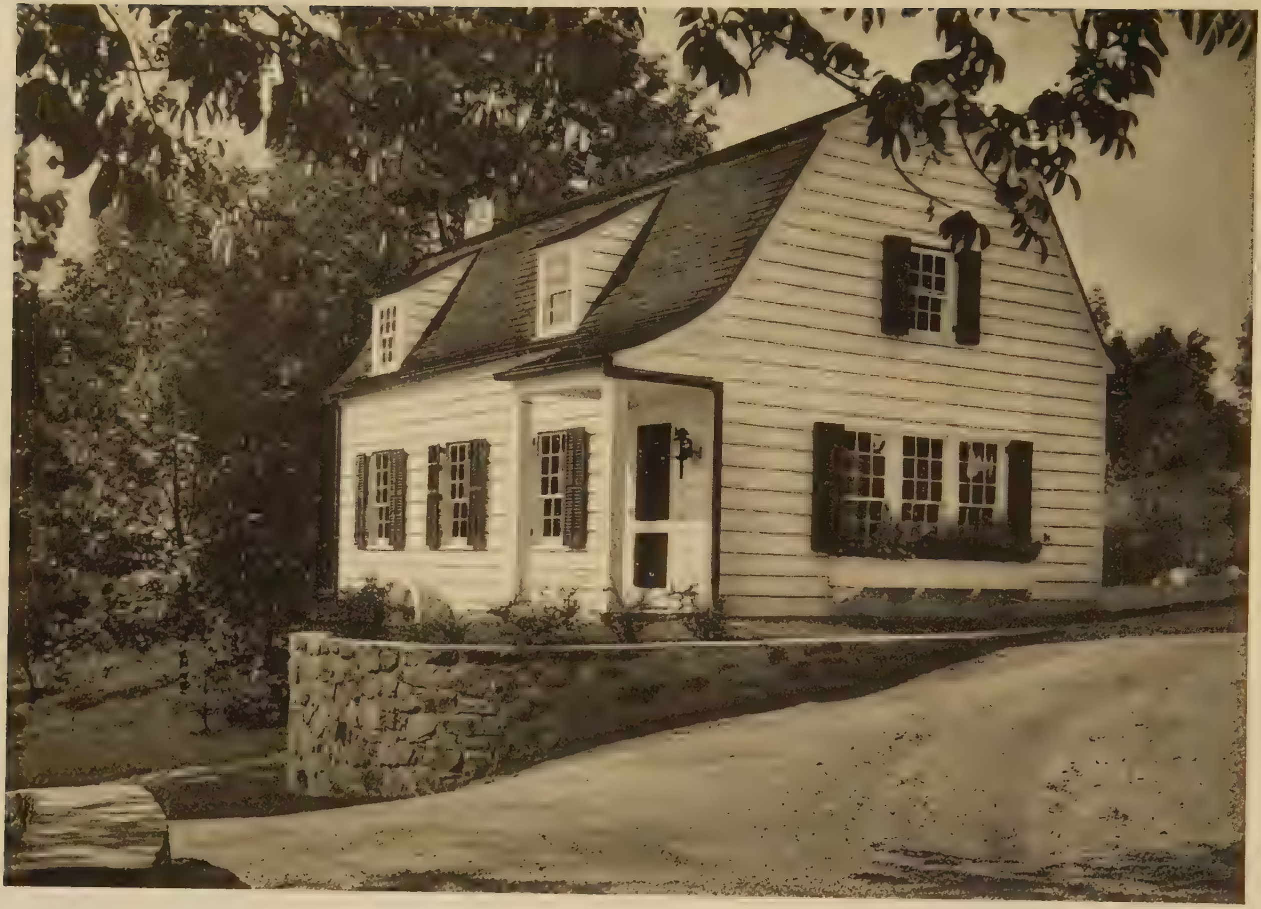
The main room shown on the first-floor plan below does not extend up to the roof; there is an attic overhead used largely for the storage of sport equipment, and accessible by means of a counter-balanced stairway

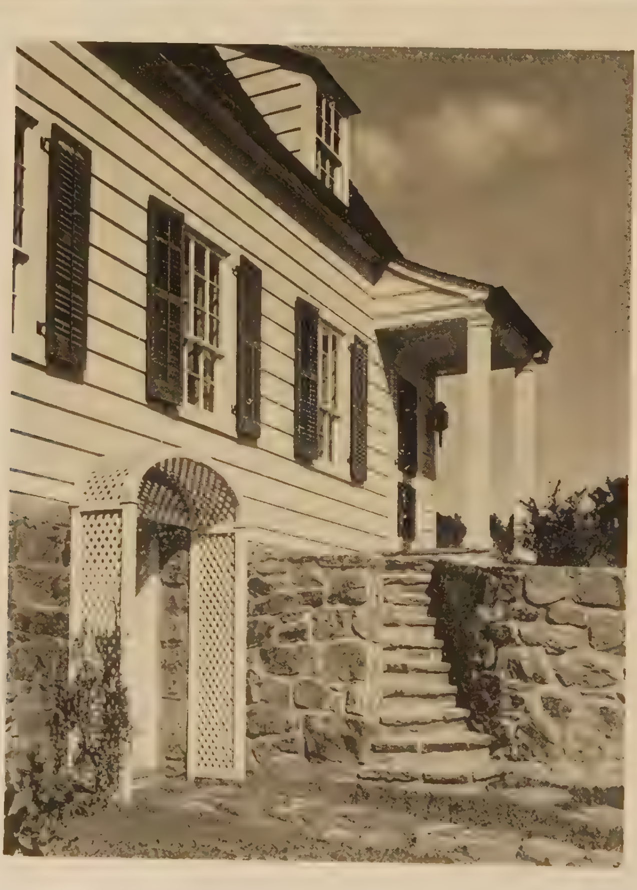


CELLAR FLOOR PLAN
SCALE



FIRST FLOOR PLAN
SCALE





Recreation Cottage
on the Estate of
Wilbert Ward,
Ossining, N. Y.
robert wiseman,
architect

The topography, partly natural, partly arranged, provides both first-floor and basement entrances at grade

FAVORITE FEATURES

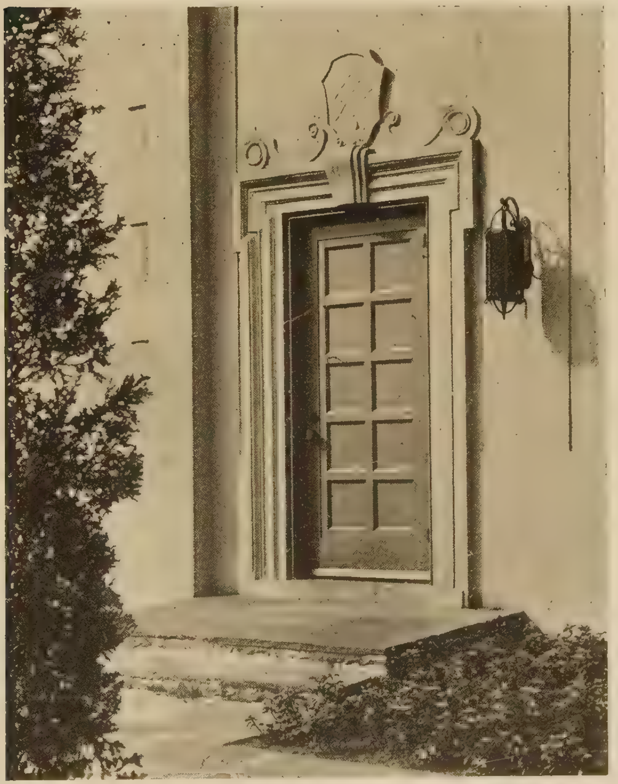
In almost every piece of work that an architect designs there is, when it is finished, something that he would prefer to have otherwise. Even though to the layman the work seems eminently successful, yet to the architect's critical eye it falls short of what he had visualized.

Once in a long while, however, he rings the bell so truly that even his sophisticated eye finds it good. Possibly it is something in the way a gable end builds up, possibly the relation of a dormer window to its roof, again it may be a mantel and chimney breast, or the terminal swirl of a stair railing. The architect tells himself that it is good, that it worked out as he had hoped, and he would not change it if that were possible.

We are going to publish some of these "favorite features"—the architect's own choice from among many achievements. Usually these will be presented as a photograph side by side with the detail drawing, so that one can compare the finished result with the preliminary visualization.

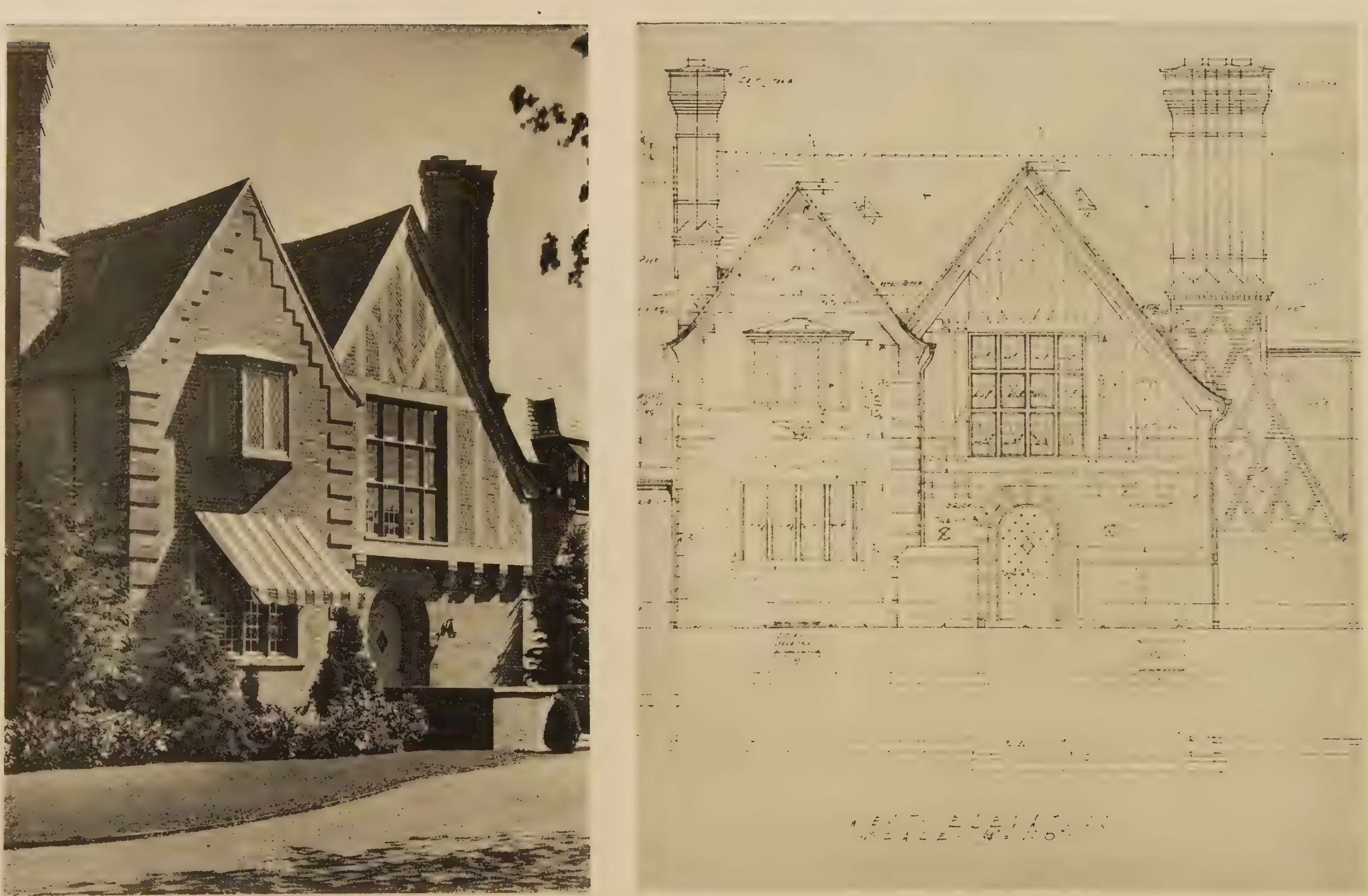
EUGENE J. LANG

NEW YORK



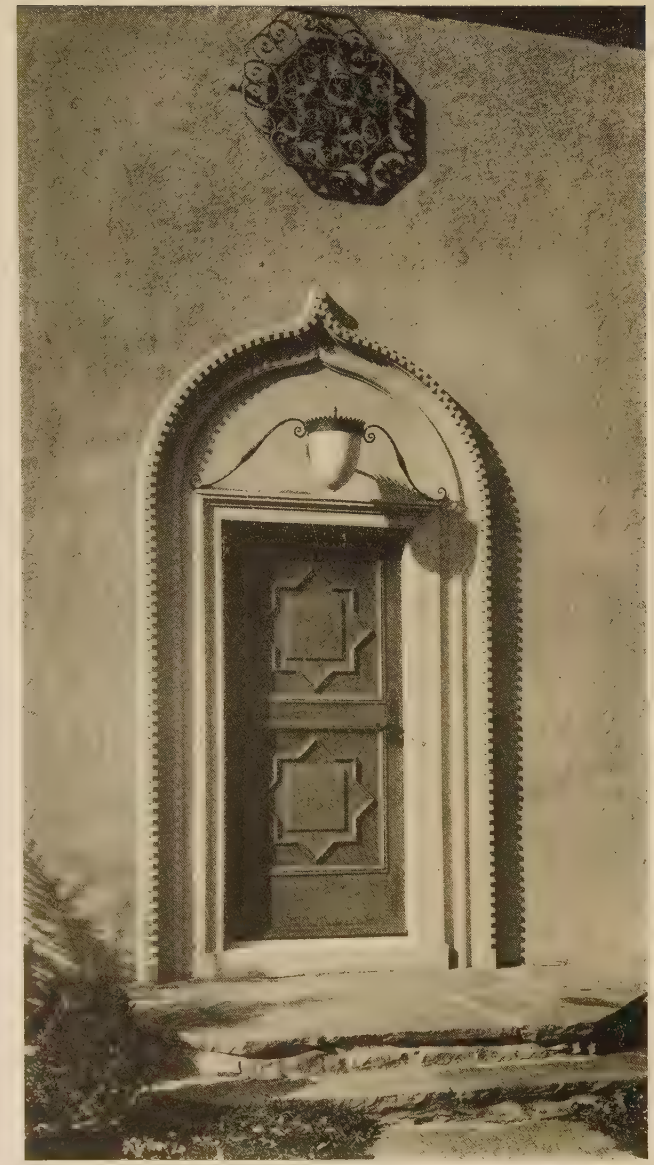
Photograph by Kenneth Clark

Doorway in the residence of Frank Braucher,
Scarsdale, N. Y.

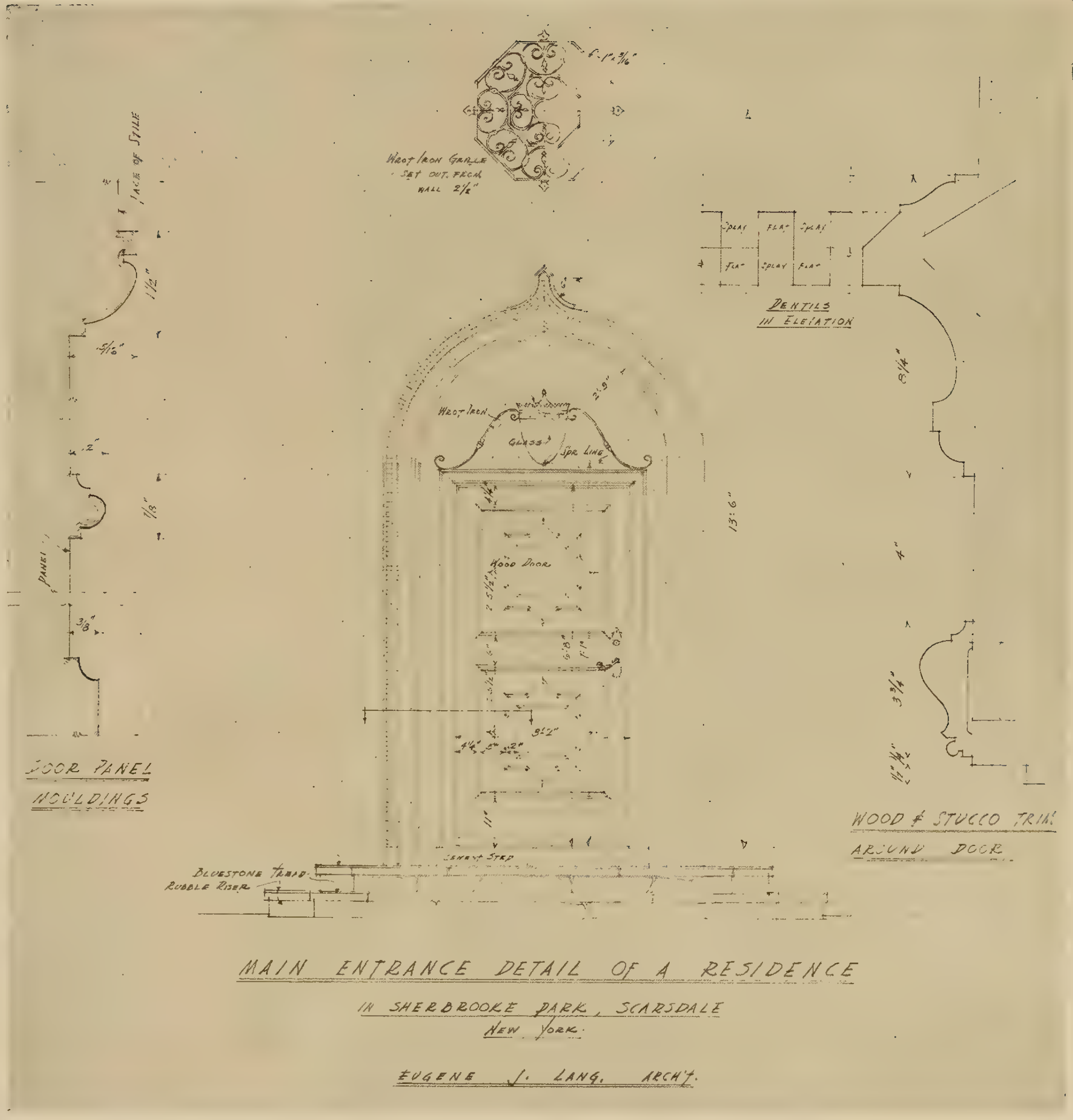


Photograph by Harold Haliday Costain

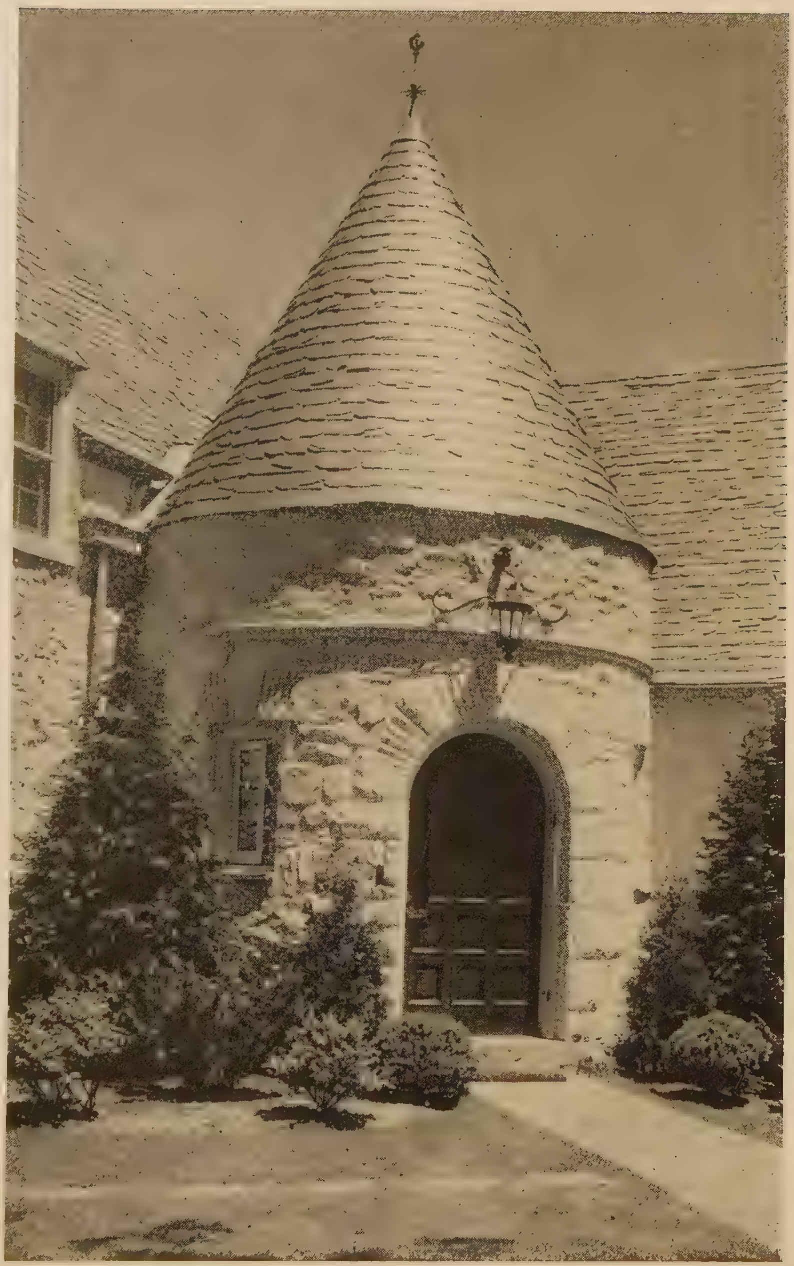
Front gables on house of William Byrnes, Scarsdale, N. Y.
Eugene J. Lang, architect



Photograph by Harold Haliday Costain



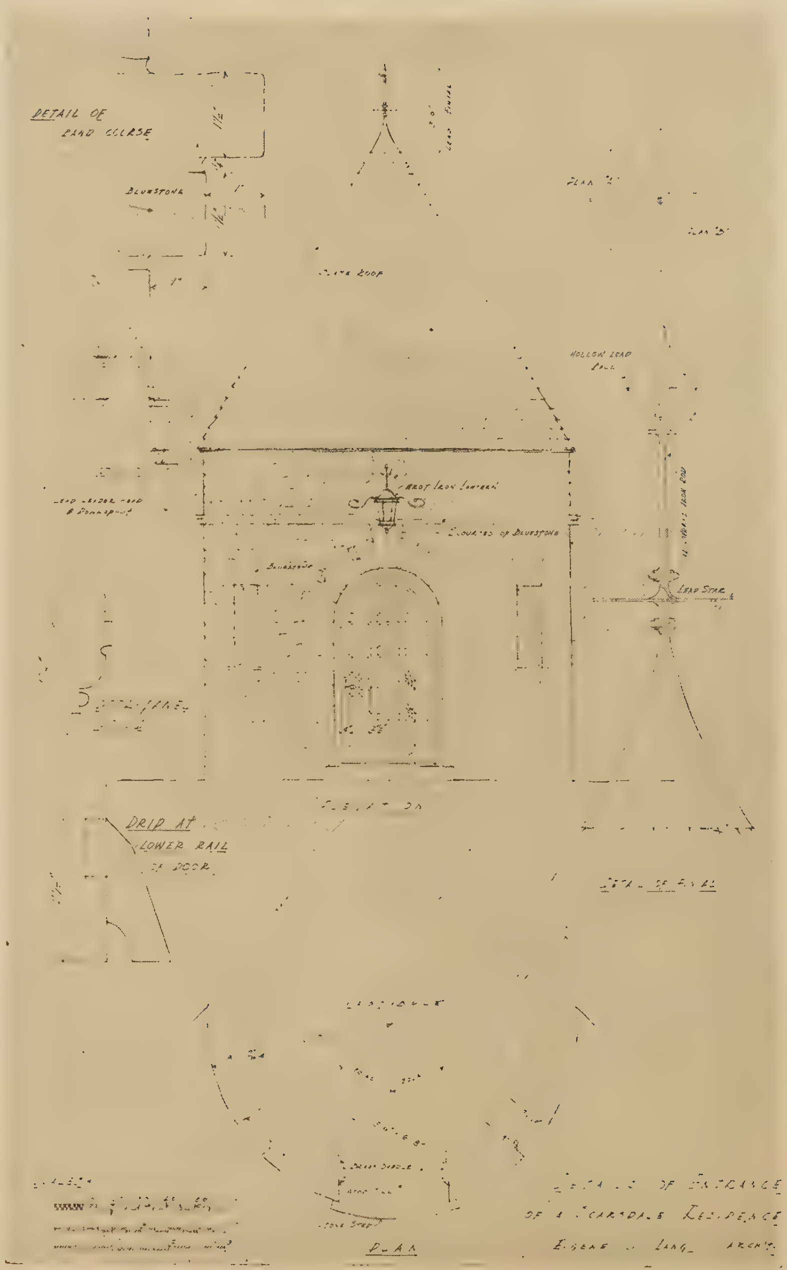
Entrance doorway, house of Mrs. Walter Price, Scarsdale, N. Y.
Eugene J. Lang, architect



Photograph by
Paul J. Weber

Entrance tower,
house of
Walter J. Collet,
Scarsdale, N.Y.

Eugene J. Lang,
architect



The Editor's Diary

Wednesday, April 1.—Miss Matte S. Scott, who has been with Architecture since Volume I, Number 1, in 1900, retires from her editorial labors to-day. Many a young draftsman, since become a well-known architect, owes his start to Miss Scott's advice and intercession. She was never quite so happy as when digging out the right sort of an opportunity for any one who appealed to her for guidance. Miss Scott is going to take a well-deserved rest—a freedom from her long-continued editorial activities which will bring her new opportunities for doing many things that have for long been postponed. In this peaceful eddy of life we and her many friends in the profession wish her long life and happiness.

Thursday, April 2.—The Le Brun Scholarship drawings are hung at The League Exhibition room—an astonishing array, if one thinks back to what such a collection would have been five years ago. Here are both the conservative Beaux Arts School type of thing, and the presentation which eschews renderings, working out an idea in cardboard and clay which is photographed for the competition presentation. There are too many designs—the problem was a working boys' club—which faintly reflect some of the better-known contemporary buildings. It would seem that the student has not grasped what modernism is, or should be—an earnest effort to solve to-day's problem with to-day's material and methods—looking upon it rather as merely a new pattern of the moment, full of geometrical ornament instead of acanthus leaves.

Friday, April 3.—Lunched with Harry Leslie Walker, talking of the way we had been taught architectural history—the slow, laborious learning of an endless procession of monuments. Much better, we thought, if those who teach would start with the principle of the lintel and post, showing what came of it up through the culmination in Greek design. Then the cautious corbelling out of a wall, until suddenly the arch principle was grasped. What mankind did with this. Then the vault, pendentive, buttress, and finally the steel frame. There we have a fundamental basis for architectural history on which trunk the branches, leaves, and fruit of individual monuments are merely incidental.

Again the teacher could show what has been the effect of materials upon man's efforts to build—the brick of Holland, the stone of France, the timber of Scandinavia, together with the ramifications into which these lead. Why is it not better to teach architecture with some such single rope for the student to grasp as he struggles through the intricate pattern traced in the history of architecture?

Saturday, April 4.—The newspapers are full these days of editorials and letters from more or less indignant subscribers concerning the proposed Metropolitan Square, otherwise popularly known as Radio City, in New York. Never before has New York been so aroused, apparently, over an architectural possibility. It is a good sign of the times, recalling the day when one of Erich Mendelsohn's buildings in Berlin was uncovered of its scaffolding, and immediately produced a real riot, the street in front of it filling with a crowd of arguing friends and foes of the architecture.

Monday, April 6.—Cass Gilbert has just been awarded a commission to design the Federal Court House building in lower Manhattan, to cost approximately $8,250,000. Mr. Gilbert, at seventy-two years of age, says very little these days except to respond when some one is conferring a medal or degree upon him, but works away at a building for the United States Supreme Court, Treasury Annex, or some other large job like the one just awarded him, producing architecture.

Tuesday, April 7.—Air conditioning is gaining ground rapidly. The American Society of Heating and Ventilating Engineers, working with the United States Bureau of Mines, has brought out as a result of experiments carried on through a ten-year period a "comfort chart." This is designed to show the proper degree of humidity for each degree of temperature. If one's living-room is 60 degrees, the humidity should be 45 per cent. If the room is at 65 degrees, the humidity should be 90 per cent. On the other hand, Dr. Ellsworth Huntington, climatologist of Yale University, says that the average humidity ought to be as high as 90 per cent, particularly in hospitals and other living quarters. He admits that so high a degree of humidity is uncomfortable, but offers as a remedy a reduction in temperature—64 degrees, rather than 70.

One difficulty is that while we can humidify dry air with comparative ease, although with considerable waste of water, the problem of drying air in seasons of excessive humidity is not so easy.

Wednesday, April 8.—Raymond Hood was quoted in the newspapers this morning in a new definition of what the architect is.

"Architecture has stepped out of its swaddling clothes and has joined hands with other industries. It has taken on an entirely new meaning. A building is no longer a simple question of architecture, sculpture, paintings, beautiful rooms, or handsome exteriors, but it has become an extremely complicated machine in which elevators, heating and ventilating plants, and almost every electrical and mechanical device contribute to make it this marvellous mechanism in which we pass a large part of our lives.

"This change has happened particularly in this last generation with the development of the mechanical age, so that architecture is now this new combination of the arts and sciences, and not merely a monument that is a work of art. The architect designing a big building to-day is more like a Henry Ford than a Michelangelo."

To which it might be said that most of the architects we know do not closely resemble either Henry Ford or Michelangelo.

Thursday, April 9.—At The League to-night we saw an exhibition of the color organ synchronized with music, under the direction of Professor G. A. Shook, of Wheaton College. He projects abstract forms of mobile color on the screen in an ever-changing kaleidoscopic form, but without the sharp pattern of the latter instrument. I can imagine that an arrangement of color might be devised which would correspond to an interpretation of music. In this particular demonstration, to my mind, there seemed to be no connection whatever between the music and unrelated mobile color.

Friday, April 10.—There were too many architectural events going on to-night: Ely Kahn speaking at the New School of Social Research, the annual dinner of the New York Chapter, A. I. A., held in the lounge of the Irving Trust Company's new building at 1 Wall Street, and the annual Dutch Treat Club Show, which, after all, is not so architectural. However, among those who, like myself, had chosen the last of the three events were Joseph Urban, Raymond Hood, Kenneth Murchison, William G. Tachau, and Wesley Bessell.

At the New York Chapter annual dinner to-night, the Medal of Honor was awarded to H. Van Buren Magonigle, with the following citation:

"An architect whose versatility in the arts of design has singularly fitted him to solve beautifully the complex and varied problems of the modern structure. A draftsman whose consummate skill has enabled him to portray his creations with inspiring legibility both to the patrons for whom they were intended and the craftsmen who were to work them out in the materials of building. Student and writer. Painter and sculptor. Loyal and tireless servant of his profession. An ever-helpful and encouraging mentor to his colleagues and to those working under him."

Monday, April 13.—Reginald D. Johnson in from the Pacific Coast on one of his frequent visits East. He was telling me of an argument with some rabid functionalist who claimed that anything serving its purpose without fault, and structurally honest, must be beautiful, to which Johnson's objection was: "What about a pair of suspenders?"

* * *

Tuesday, April 14.—Harvey Corbett is quoted in the newspapers in his comment upon the metal house shown at The Architectural League Exposition: "I predict that we shall have metal homes because it is in the small home that all architectural experiments are tried." Which is rather surprising in view of the fact that the small home has shown less conformity to architectural and structural progress in the last century and a half than any other thing we are building.

Wednesday, April 15.—Spent an hour with Frank Forster, digging out some of his preliminary sketches to illustrate Rayne Adams's article on how he works. Many of these first tentative sketches were on the backs of envelopes or on small scraps of paper, usually tiny perspectives in black or red pencil with a strongly prevailing characteristic: each one of them fitted the house to an irregular site. Upon the topography or orientation Forster bases each composition, and it is uncanny the way he builds up a picturesque mass of closely knit units, sometimes with a floor plan sketched in advance, but frequently based on a floor plan that is in his mind only.

Thursday, April 16.—Lunched with a group of the voyageurs who, on May 21, will sail for Europe bearing a gift to the Republic of France, a memorial flagstaff and base designed by Fred Hirons, as a token of America's appreciation and gratitude for France's aid in architectural education. Fifty or sixty architects, mostly Beaux-Arts men, will go over for the presentation ceremonies, holding incidentally, at Fontainebleau, an exhibition of the work of American architectural students.

Friday, April 17.—Dined with Reginald Johnson and enjoyed a very interesting evening in discussing his methods of practice on the Pacific Coast—all of which I must try to bring out in an analytical portrait following Rayne Adams's series.

We went over to the Grand Central Palace to see whether the show commemorating The Architectural League's fiftieth anniversary was ready for its opening to-morrow. As almost invariably happens, the night before presents a scene of chaos which only by a miracle can be resolved into order and beauty. Nevertheless, that miracle always happens.

Saturday, April 18.—This afternoon a large company gathered by invitation to see the opening of The Architectural Exposition. In spite of the fact that the most conservative members of the profession feared that this would be a radical show architecturally, the daily press representatives seemed keenly disappointed over the fact that, as they expressed it, "It is almost all old stuff." Personally, it seemed to me that the balance between the traditional and the results of contemporary thought had been very nicely maintained in a well-hung exhibition of which a brief pictorial summary is shown on another page.

Sunday, April 19.—Off to Washington on a late afternoon train, reaching there in time to circle The White House and its environs in the glamour of a brilliant spring night. York & Sawyer's new building for the Department of Commerce is almost completed, so far as the exterior is concerned and, considering the fact that here is a building occupying three contiguous city blocks, it is a masterly handling of this difficult problem. It might have been expected that one would encounter a building recalling the stupendous length and size of the Manufacturers' Building of the Chicago World's Fair in 1893, but its great masses have been broken up so skilfully that there is no suggestion of monotony. I cannot quite reconcile myself to the mottled tile roof.

It is interesting to speculate as to what might have been done with this problem if the restrictions as to cornice heights and architectural style had not been rigidly enforced by those who feel that we must continue to make all Washington a modern Rome.

Monday, April 20.—Spent an hour with President Hoover at The White House reporting, with six other editors, on the present state of the major industries, and found him amazingly familiar with the details of all—food, shelter, oil, steel, manufacturing, textiles, and automotive transportation. The President agreed that in the matter of shelter the most outstanding brake on our progress is financing. We have funds available and readily obtainable for almost every other major activity, but it remains difficult and expensive to secure mortgage loans on new dwellings. There are efforts under way to remove this difficulty.

Tuesday, April 21.—Back in New York in time to perform an altogether unnecessary introduction of Ralph T. Walker to a luncheon conference of one hundred fifty men at The League. Walker led a discussion on the subject of "The dangers in regarding modern architecture as an accomplished style," stressing the point that style as the client ordinarily speaks of it is merely the patter of architecture. If we carry out the practical and æsthetic requirements of an architectural problem, it may, and probably will, result in style eventually, but any attempt to superimpose style upon it is usually futile. We have now arrived at a style in the airplane; if the helicopter is developed, the public will resent it at first as not looking like an airplane. If some one should discover that an automobile would be better with the engine at the rear, the public would resent the new product as not looking like an automobile. In a word, style hampers our intelligent appraisal of the way we solve our present-day problems. Electus Litchfield, W. F. Lamb, and Ely Kahn contributed to the discussion, but not a single real functionalist raised his voice.

* * *

Wednesday, April 22.—Ely Kahn led a discussion on the subject of "Who or what is the twentieth-century client?" Passing over the question of whether there is any such person these days, the discussion resolved itself largely into the matter of fees. Mr. Kahn and Stephen H. Voorhees both thought that the old 6 per cent basis on cost has been so completely outgrown as a workable system in large building operations that it has no great significance to-day. Mr. Gompert made the point, however, that without such an established minimum fee, the smaller practitioners throughout the country would unquestionably have more difficulty than they do now in finding a general acceptance of some such value placed upon their services. The lump sum, or the lump sum plus actual costs of drafting, seems to be gaining ground. It, at least, has the great advantage of removing the unpleasant feeling engendered by the fact that additions and changes recommended by the architect may thereby increase his own fee.

CONTACTS

DEVOTED TO A BETTER UNDERSTANDING OF THE BUSINESS SIDE OF ARCHITECTURE AND ITS RELATION TO THE INDUSTRIES

Working for Each Other

By Bennett Chapple

Vice-President, The American Rolling Mill Company

An address before a joint luncheon of the American Institute of Architects and the Producers' Council at San Antonio, Texas, April 15, 1931

IT is a happy day that brings American business and professional minds together. Last week I was lunching with the president and the vice-president of the Westinghouse Electric & Manufacturing Company. As we looked out of the window of the lunchroom upon the scene of that busy plant, where forty thousand men are employed, one of them said: "The greatest thing we are learning, more and more every day, is that we are all working for each other." And I thought, there's the theme song for my talk at the A. I. A. and Producers' Council meeting.

The American Institute of Architects and the Producers' Council are working for each other. It is in keeping with the times and the changing tides of business that we learn to work together in the common service of mankind. Your part of the job is to use your creative skill in combining beauty and utility in human habitation. Our part is to furnish materials worthy of such service. With this basis of understanding we can do things and go places. We need each other in the onward march of progress.

The aims and purposes of the Producers' Council are well known to you, but too few, as yet, have realized its real size and importance, and its splendid opportunity to serve architecture. The total assets of the member companies, with allied groups, is twenty-three billion, five hundred million dollars, and they employ more than two million men. Their combined sales each year is a colossal sum. The men who head these companies make up the business leaders of the nation—business geniuses, whose names are well known throughout the world. The company policies that have built these great business enterprises have moulded a new world and a new civilization. Their scientists are opening new pathways for the progress of mankind. Their research departments have spent and are spending millions of dollars in making available materials of proven merit. These are the basic things that make up the Producers' Council, which is measuring its stride with you to-day, bringing a new kind of helpfulness—the helpfulness that comes from lending strength, one to the other.

I am not an architect. It would be foolish for me to try to tell you of the trend of your profession, which you know so much better than I, but perhaps I can say something of interest about the changing tides of business which affect your work. These tides are made up of changing products, changing customs, changing habits, and changing methods of doing business. Now, let's go back a bit to get a good perspective. In the days before the Civil War, all business was practically on a personal basis. There were no great corporations to carry on the complicated business of life. The development of the corporation replaced the old order of things, and invested capital took the place of personal ownership. You remember the travail we went through as corporate growing pains fixed themselves on the country. We rioted in trust-busting rodeos, but in the end the corporate scheme of business took root and here we are to-day served by giants that were beyond the wildest imagination of economists a generation or two ago. And the public who fought the corporations now owns them.

Then think of the changing tides of business caused by invention. The quill pen gave way to the typewriter; the sailboat gave way to the ocean liner; the horse and wagon gave way to the automobile; the canal gave way to the railroad; the rule of thumb gave way to research; the tallow candle gave way to electricity; the horse gave way to the tractor; the scythe gave way to the reaper; the reaper gave way to the combine; the cobbler gave way to the shoe manufacturer; the blacksmith gave way to the garage mechanic; the signal fire gave way to the telegraph and telephone; the country store gave way to the chain store; the spinning-wheel gave way to the loom; the shovel gave way to the ditch-digger; the pitchfork gave way to the hay-loader; the setting hen gave way to the incubator and brooder. And so it goes—changing tides, every one of which represents new business opportunities that have been quickly seized upon.

And what of the future? Where is radio taking us? What will television bring? What lies around the corner in research that has already given us rayon to replace silk, and hundreds of synthetic products? What can we expect from the x-ray as it passes from medical science and surgery to delve into the secrets of the atoms of metallurgy? What about airplanes and zeppelins? These are some of the new forces that represent changing tides that are still a long way from their crest.

Nor is this the complete picture. Back of all these tides are still smaller tides representing the new uses of products. Take the iron and steel industry as one example. In Sangamon County, Illinois, was laid, last fall, the first metal-base highway. It was the result of an idea that finally took root. It is too soon to count this anything more than an experiment, but so has been the beginning of every change in the tide of human affairs.

Style changes, too, represent another phase of the restless tides of our daily lives. The soft collar replaced the stiff collar almost over night. . . .

I do not need to tell you how all these changing tides affect your business. Bringing new ways to live affects architecture perhaps as much as any other profession. . . .

The constant development of new materials and new processes to make more and better materials available is the part the Producers' Council must continue to play in the future as in the past. The fight against cheap imitative materials affects every legitimate business and profession. Price and price alone brings ruination, and the Producers' Council is ready to join the American Institute of Architects in a war against mere cheapness. We must stand together, ready to fight each other's battle for the cause of good material and good architecture. It takes the courage of conviction to stand against the demands that are sometimes made for cheap construction, but the result is worth all the determined effort it costs. Especially is this necessary at this time as we start out on a new era following the drastic depression of the past eighteen months.

We have been going through a psychology of fear. What we need most is a return of common sense. With one hundred and twenty million people, with an annual income of eighty-nine billions a year, and an annual savings of sixteen billions, and a total wealth of three hundred and forty billions, we ought to be congratulating ourselves. The attitude of mind explains everything. We complain of hard times, yet nobody would want to go back to conditions before the World War. We have learned many lessons. Perhaps the most valuable one is that we can appreciate as never before how dependent we are—one on the other. The workman depends upon his employer; the employer upon his workmen. The manufacturer depends upon the buyer; and the buyer upon the manufacturer. . . .

During the coming year the Producers' Council expects to be of greater help to the A. I. A. than ever before. We have pledged ourselves to produce only the best and most dependable materials, and we ask for your faith and confidence in so far as we may be able to serve you and the ultimate consumer. Together we can get much farther than by going it alone, for, after all, isn't it a fact, we are just working for each other?

The Editor's Report to the President

On April 20 the National Conference of Business Paper Editors met with President Hoover in the Cabinet Room at the White House. Seven editors reported, each in a three-minute address, giving a survey of the present situation with regard to the major industries. The editor of Architecture reported on "Shelter" as follows:

Mr. President:

The building industry lags far behind most of our productive activities, slow to accept improved methods and the ingenuity of our day, such as mark our younger industries.

Residential building at the moment is the key-log in the jam of our building progress. The utilization of public and institutional works as a compensating force, due, Sir, to your own timely suggestion, is recognized as a powerful corrective. It has been slow in starting but the movement is gaining speed and momentum. Residential work—forming about half of our normal building—lags badly, in spite of the fact that it is now on the bargain counter.

The process of building oneself a home is too formidable an undertaking. Make it easier to accomplish, more inviting, more dependable in its value.

We must modernize the process of home-building as we have modernized almost every other one of our national productive activities. If the purchase of a thousand-dollar automobile were as fraught with perils, delays, uncertainties, as the purchase of a $5,000 home, most of us would still be driving the old horse and buggy.

Standardization must be applied in house building; not the standardization of the whole building—that is distasteful to our desire for individuality—but rather the standardization of parts. And we are slowly approaching that sort of standardization without recognizing it—in plumbing fixtures, in radiators, in kitchen dressers, in steel sash.

But we do not look ahead of us along this obvious succession of steps to see where the path leads, and hasten at once to its logical end. We still pile brick on brick as did the Egyptians, we still nail shingle on stud frame as did the builders of Paul Revere's house. We still keep house building a special tailoring job, with the result that we steadily get less house for our money rather than more for our money, as we do in the things we make by modern methods. The surprising thing is that we do not more quickly grasp the object lesson spread before our eyes in the erection of our commercial and industrial structures, proceeding under modern ideas.

Again, a brake on our progress is our financing. The building-and-loan associations are doing their job, but the banks are not. They hesitate to make loans involving examination of so many factors: the personal risk, the quality and quantity of the building, the resale value now and five years from now. Most of that risk exists because we have not developed standardized and certified building—building inspected and registered—Grade A, B or C. If banks could recognize the character of a risk at a glance the loans would flow.

Organized effort along all promising ways of improving the product, decreasing its cost of production, and making it easier to buy, must develop the wider market.

ARCHITECTURE'S PORTFOLIO OF

MAIL-CHUTE BOXES

THE FIFTY-SIXTH IN A SERIES OF COLLECTIONS OF PHOTOGRAPHS ILLUSTRATING VARIOUS MINOR ARCHITECTURAL DETAILS

Forthcoming Portfolios will be devoted to the following subjects: Weather-Vanes (July), Bank Entrances (August), Urns (September), Window Grilles (October), China Cupboards (November), and Parapets (December). Photographs showing interesting examples under any of these headings will be welcomed by the Editor, though it should be noted that these respective issues are made up a month in advance of publication dates.

## *Subjects of Previous Portfolios*

1926–27

- DORMER WINDOWS
- SHUTTERS AND BLINDS
- ENGLISH PANELLING
- GEORGIAN STAIRWAYS
- STONE MASONRY TEXTURES
- ENGLISH CHIMNEYS
- FANLIGHTS AND OVERDOORS
- TEXTURES OF BRICKWORK
- IRON RAILINGS
- DOOR HARDWARE
- PALLADIAN MOTIVES
- GABLE ENDS
- COLONIAL TOP-RAILINGS
- CIRCULAR AND OVAL WINDOWS

1928

- BUILT-IN BOOKCASES
- CHIMNEY TOPS
- DOOR HOODS
- BAY WINDOWS
- CUPOLAS
- GARDEN GATES
- STAIR ENDS
- BALCONIES
- GARDEN WALLS
- ARCADES
- PLASTER CEILINGS
- CORNICES OF WOOD

1929

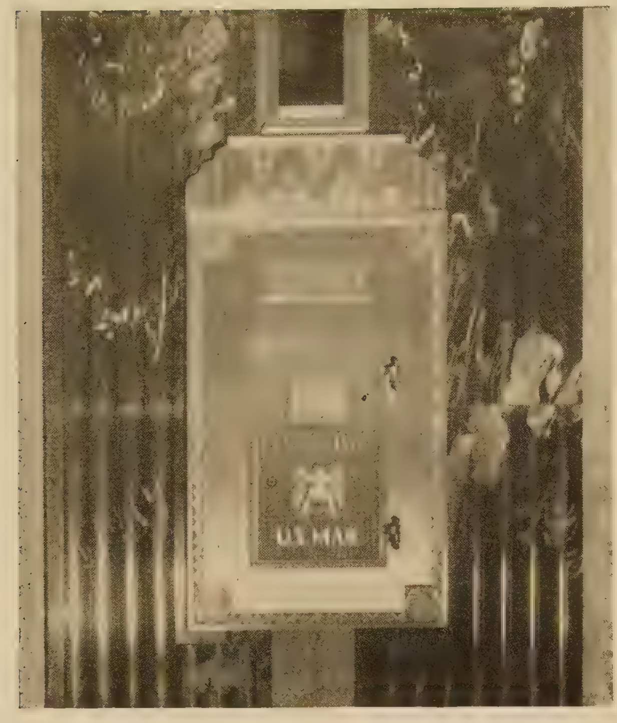
- DOORWAY LIGHTING
- ENGLISH FIREPLACES
- GATE-POST TOPS
- GARDEN STEPS
- RAIN LEADER HEADS
- GARDEN POOLS
- QUOINS
- INTERIOR PAVING
- BELT COURSES
- KEYSTONES
- AIDS TO FENESTRATION
- BALUSTRADES

1930

- SPANDRELS
- CHANCEL FURNITURE
- BUSINESS BUILDING ENTRANCES
- GARDEN SHELTERS
- ELEVATOR DOORS
- ENTRANCE PORCHES
- PATIOS
- TREILLAGE
- FLAGPOLE HOLDERS
- CASEMENT WINDOWS
- FENCES OF WOOD
- GOTHIC DOORWAYS

1931

- BANKING-ROOM CHECK DESKS
- SECOND-STORY PORCHES
- TOWER CLOCKS
- ALTARS
- GARAGE DOORS



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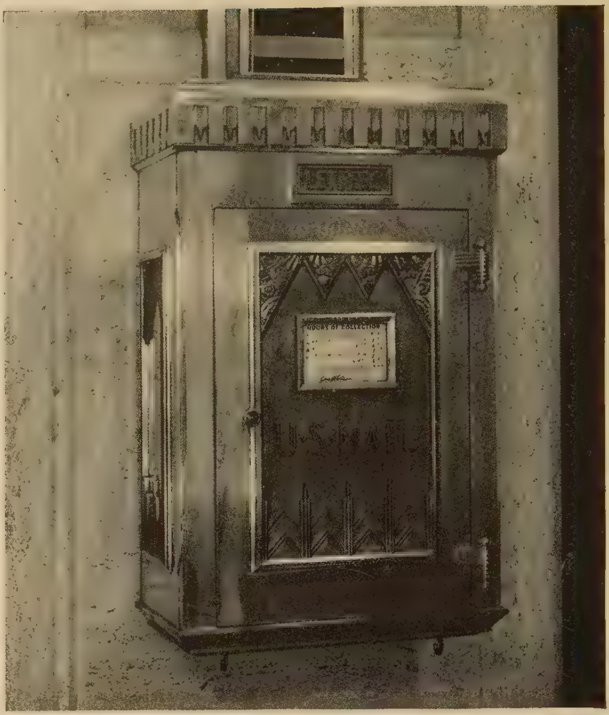
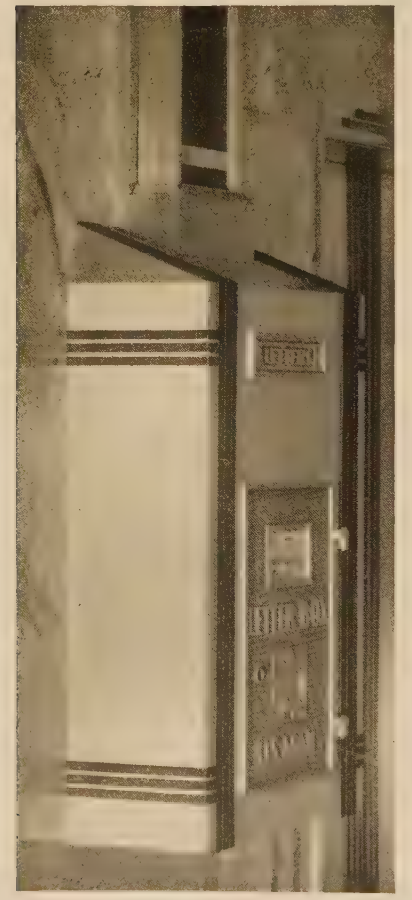


A. M. Atkinson

Holabird & Root



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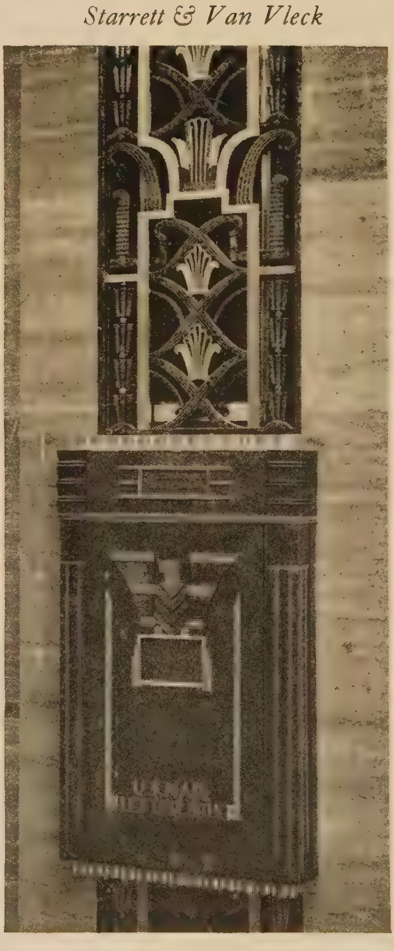

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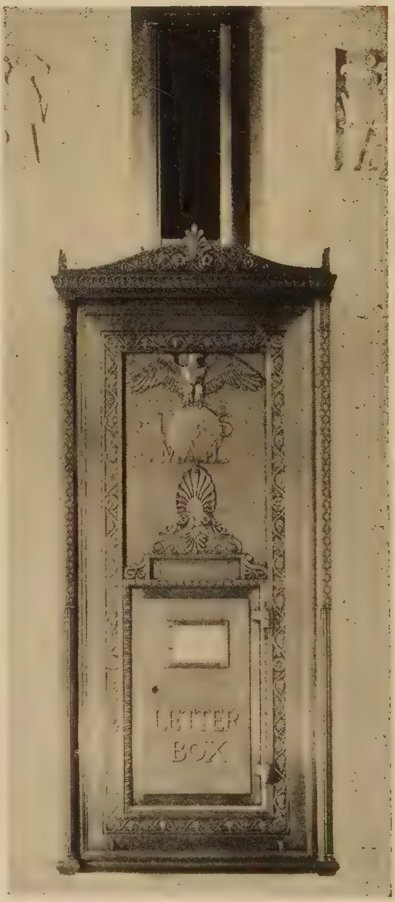

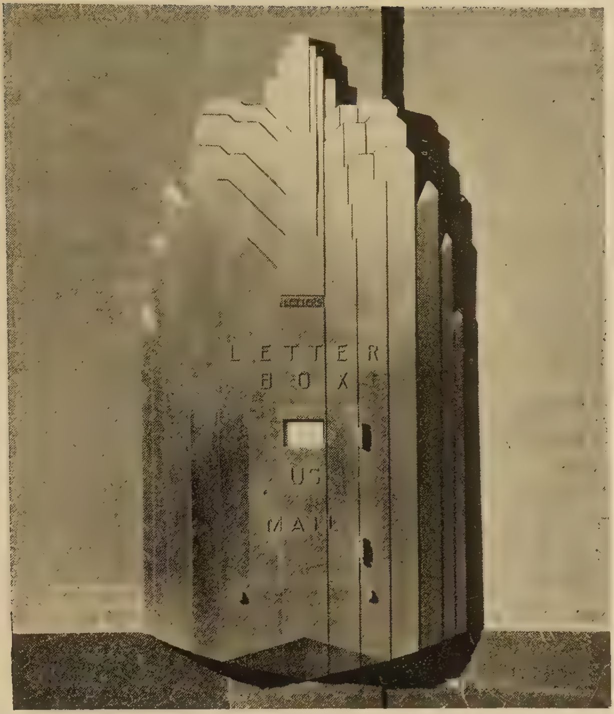

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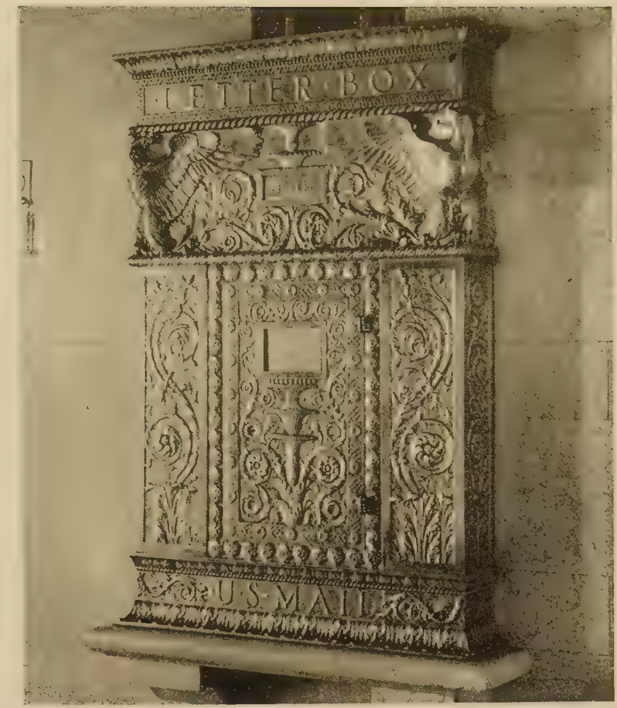
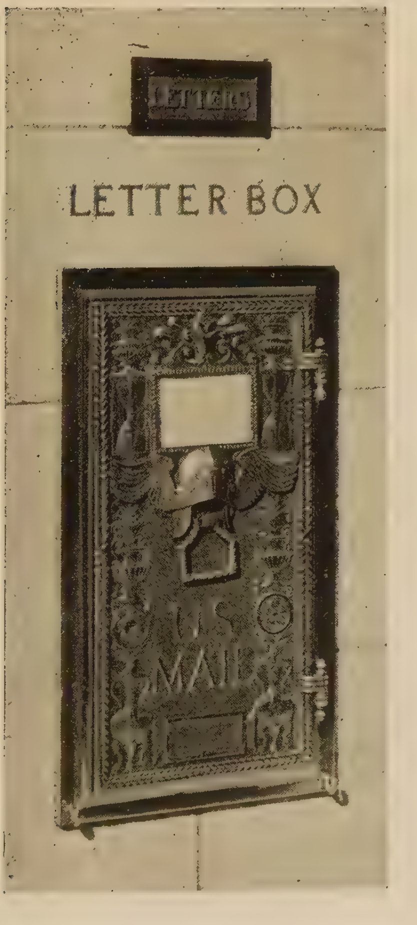


York & Sawyer

Sloan & Robertson



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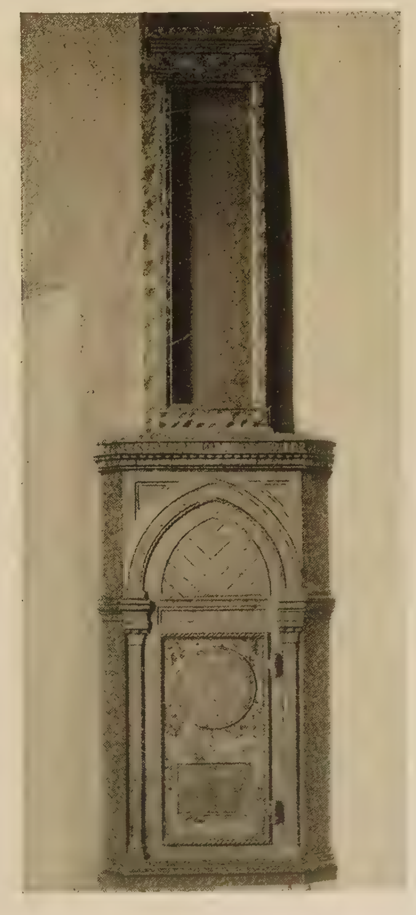
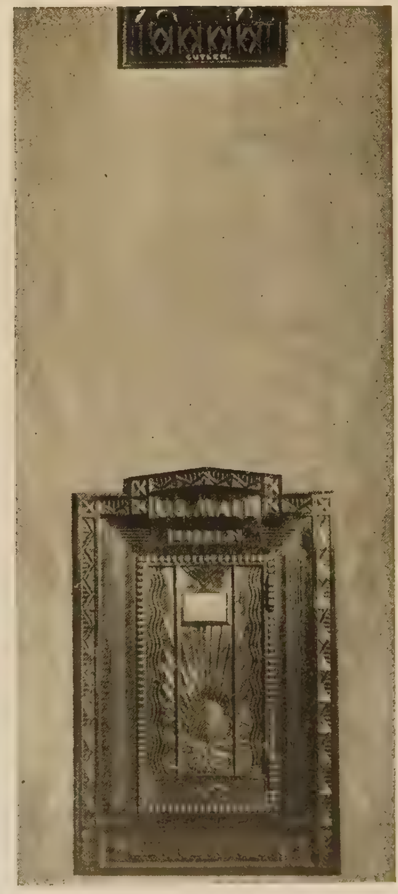
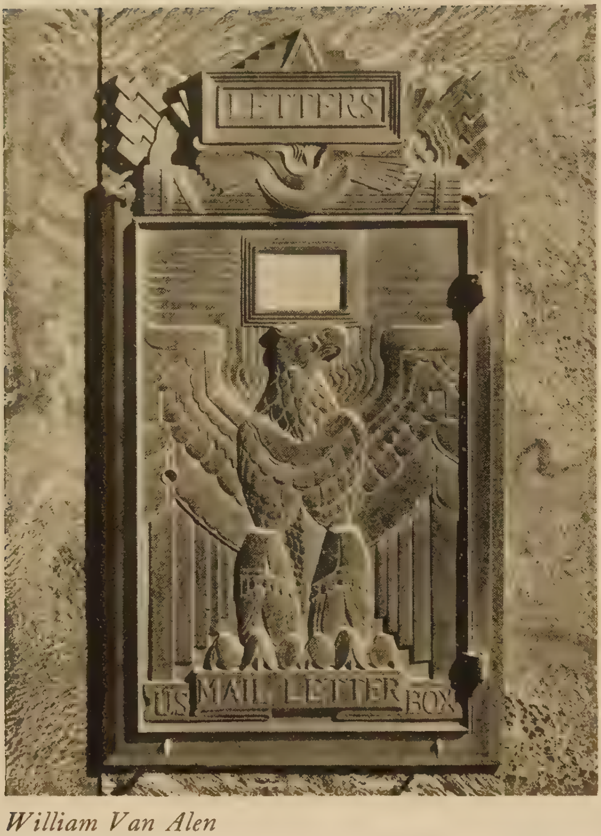


Cross & Cross





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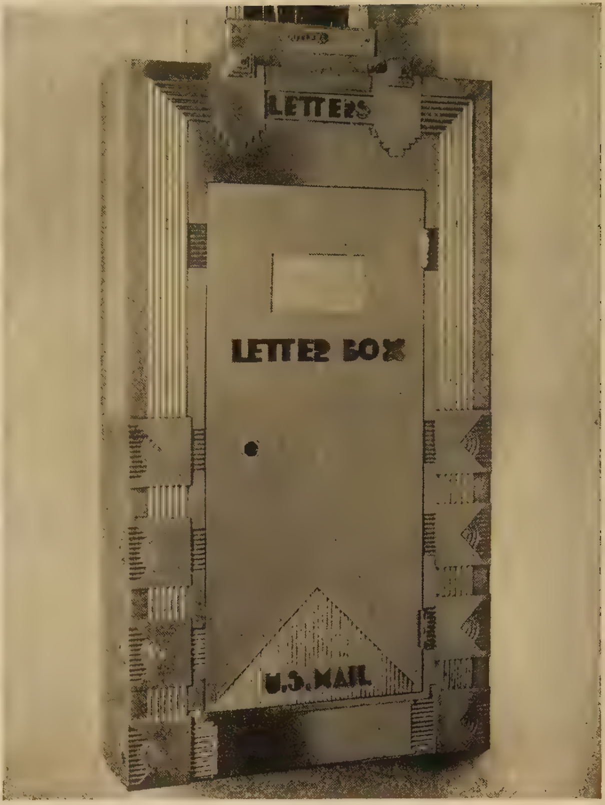
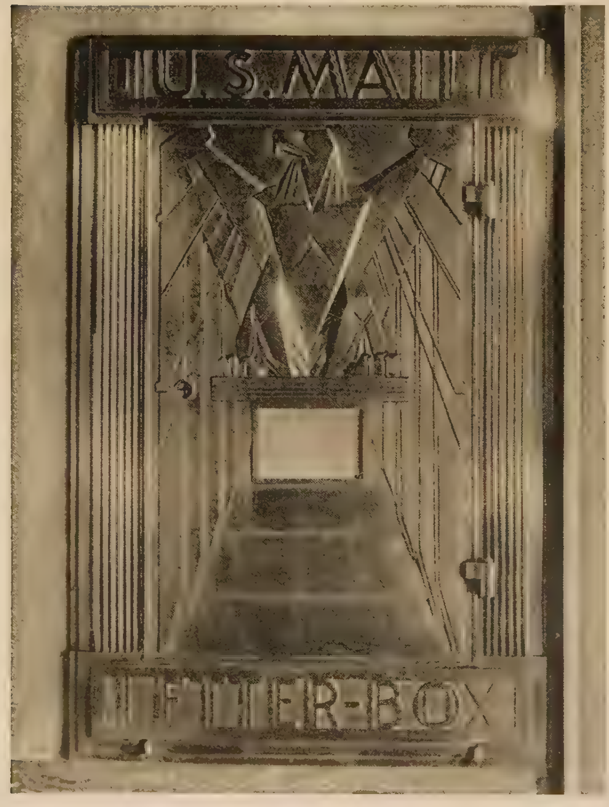


The Firm of Ely Jacques Kahn

Sloan & Robertson



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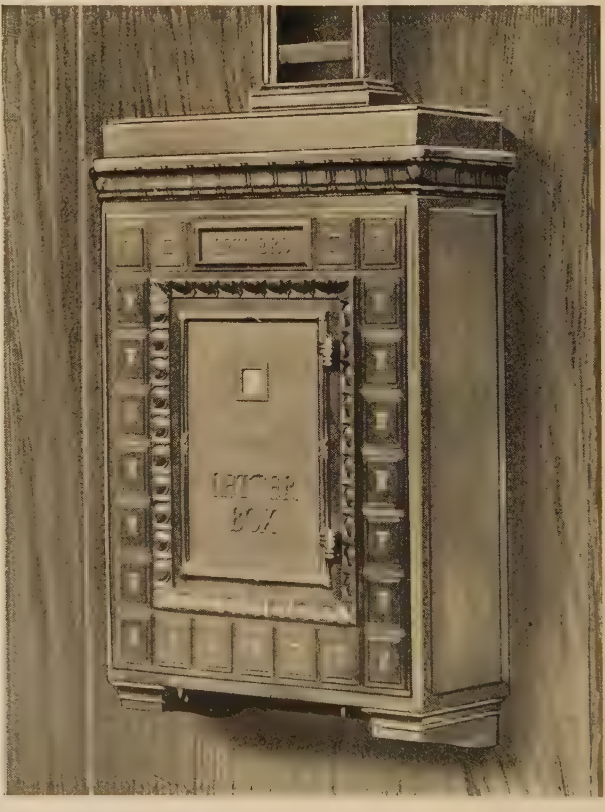

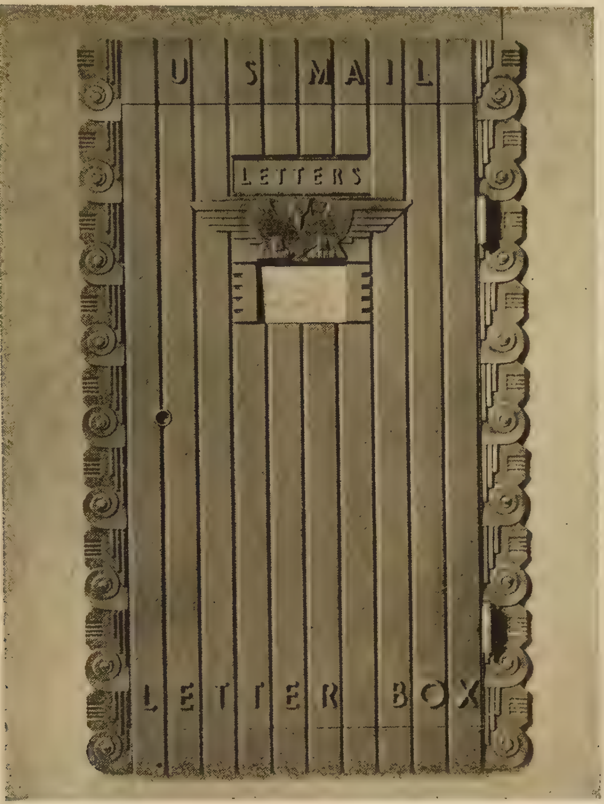

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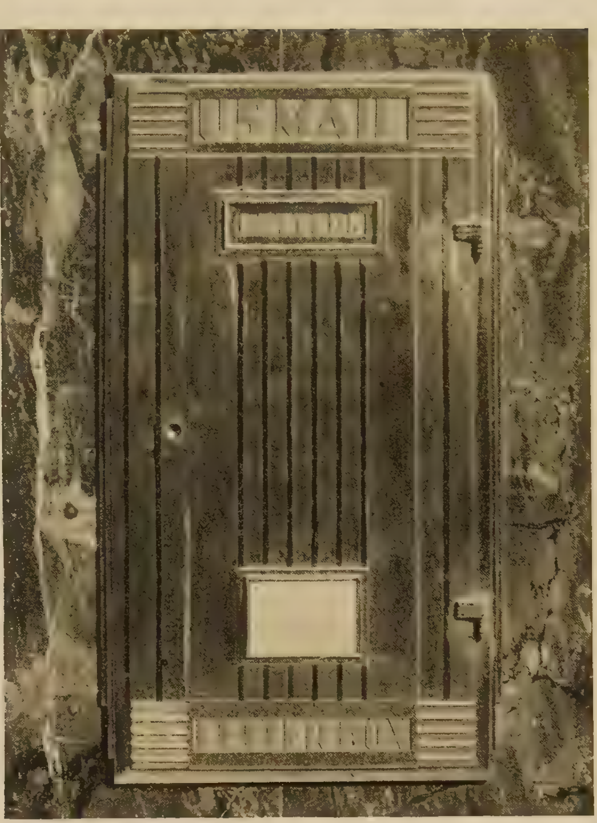
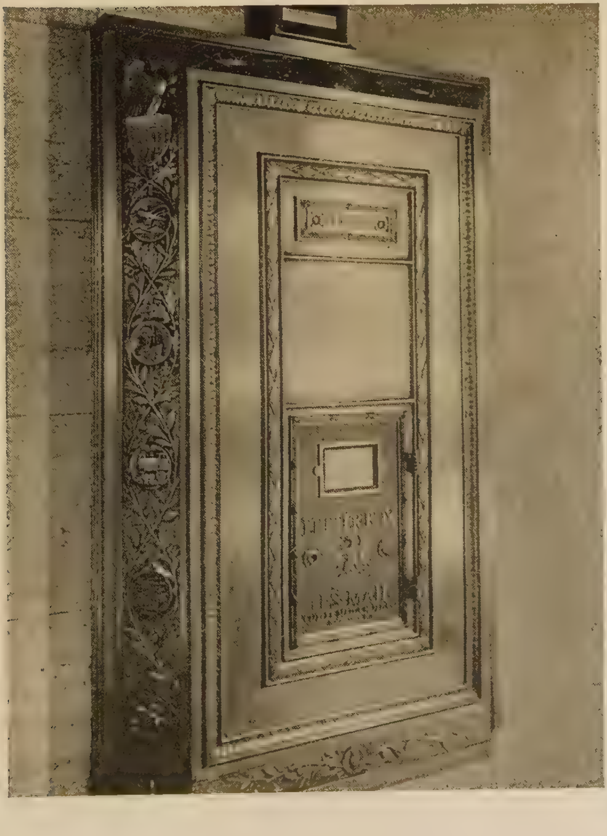


Shreve, Lamb & Harmon

Cass Gilbert



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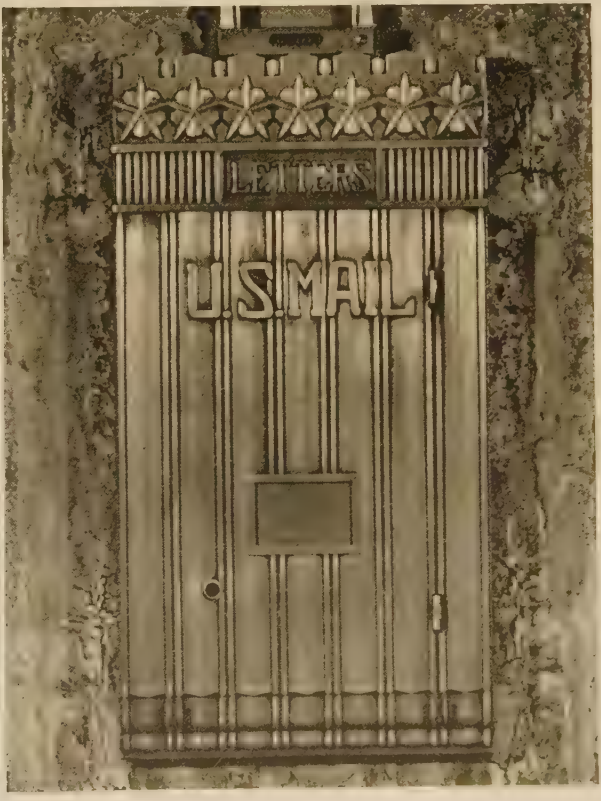

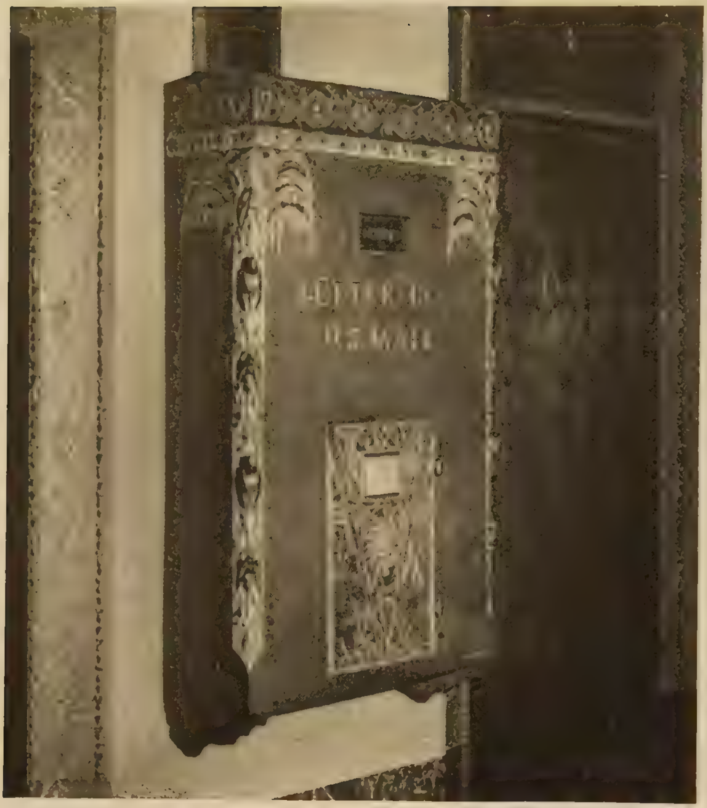

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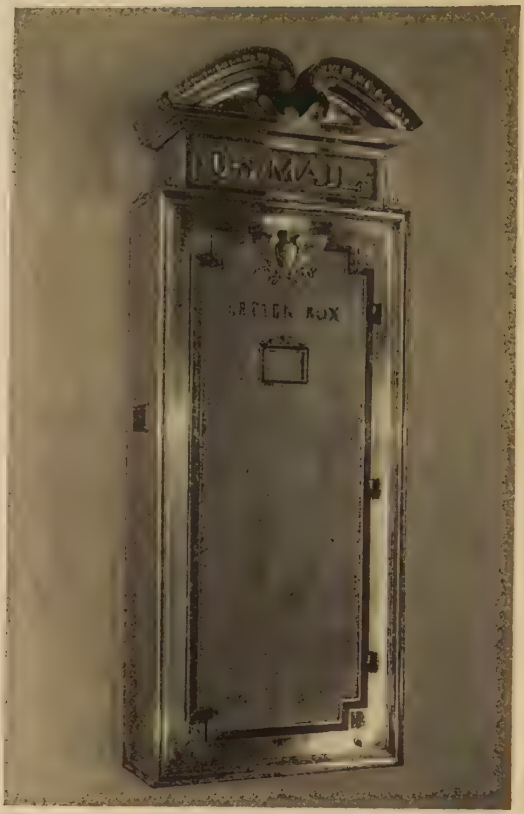

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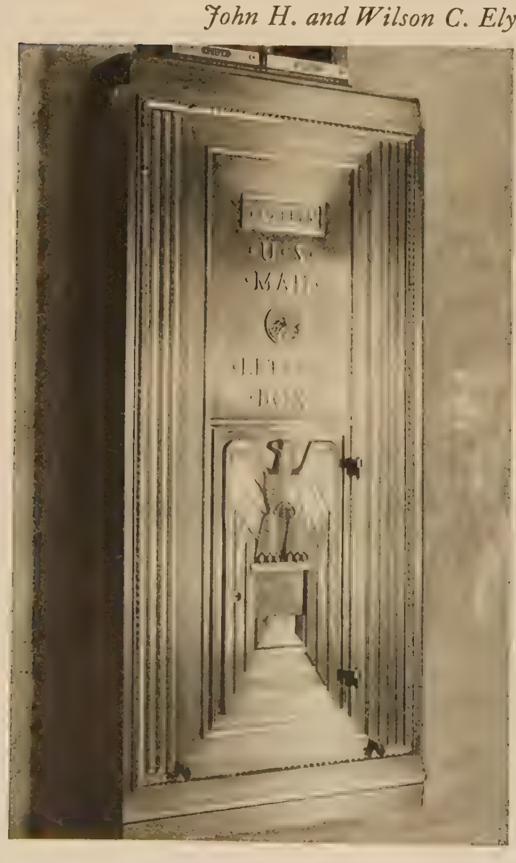

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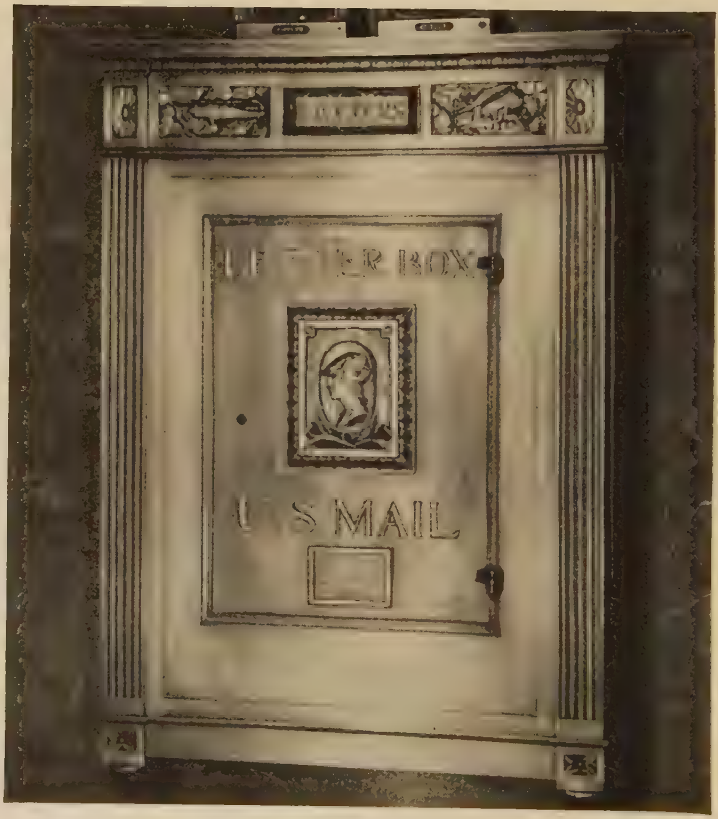

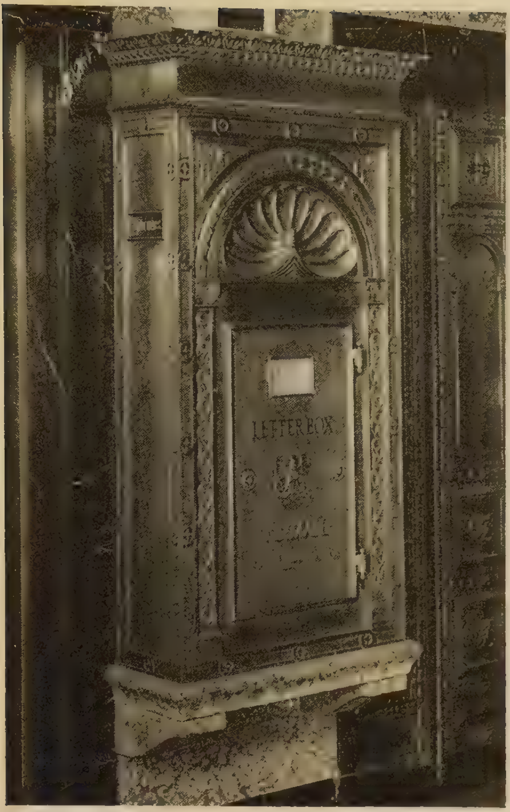

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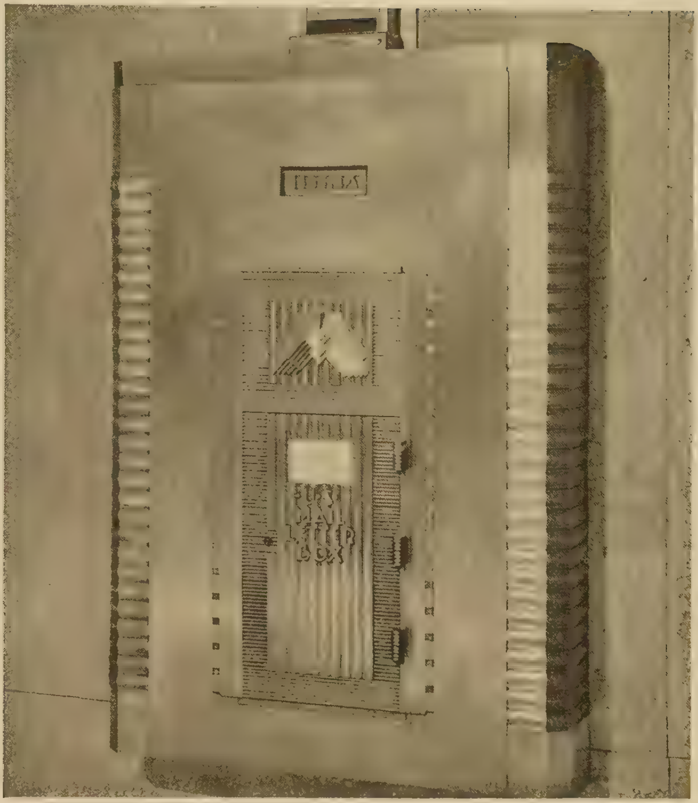
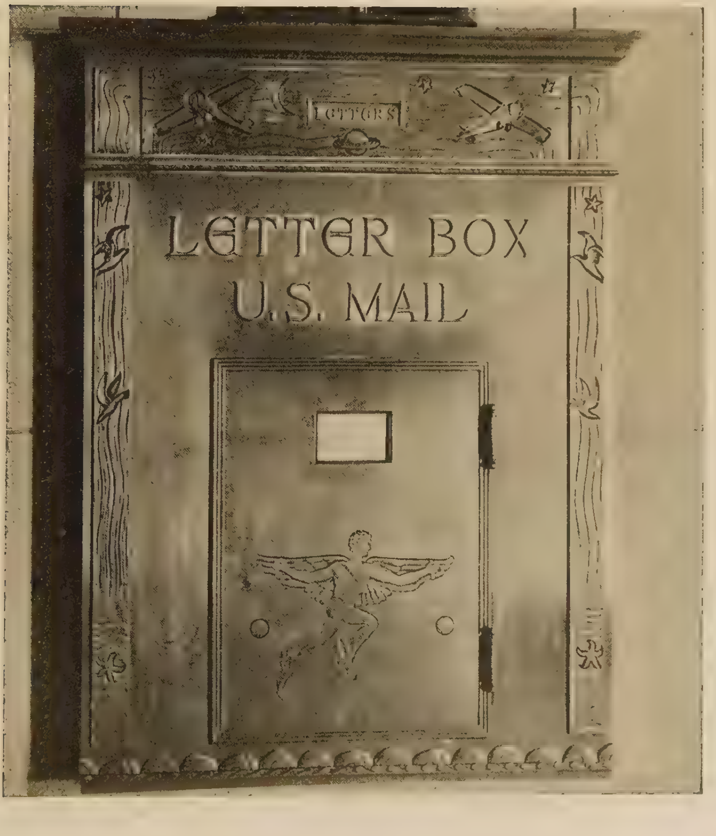


The Firm of Ely Jacques Kahn

Starrett & Van Vleck



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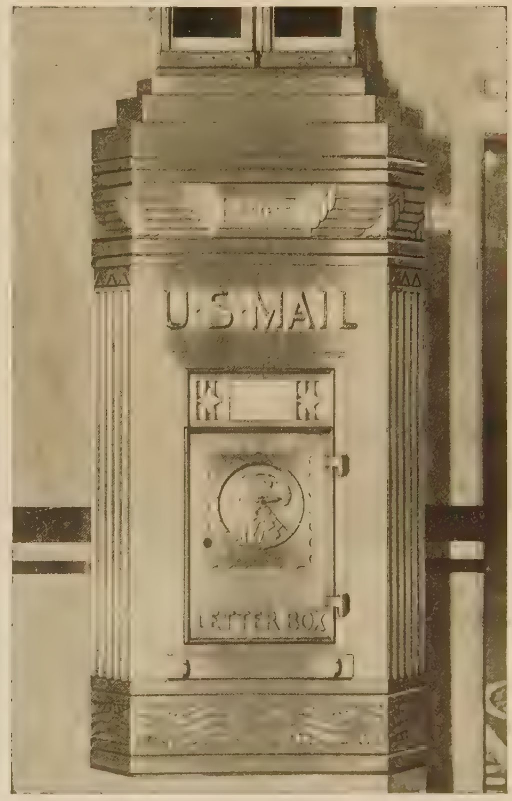

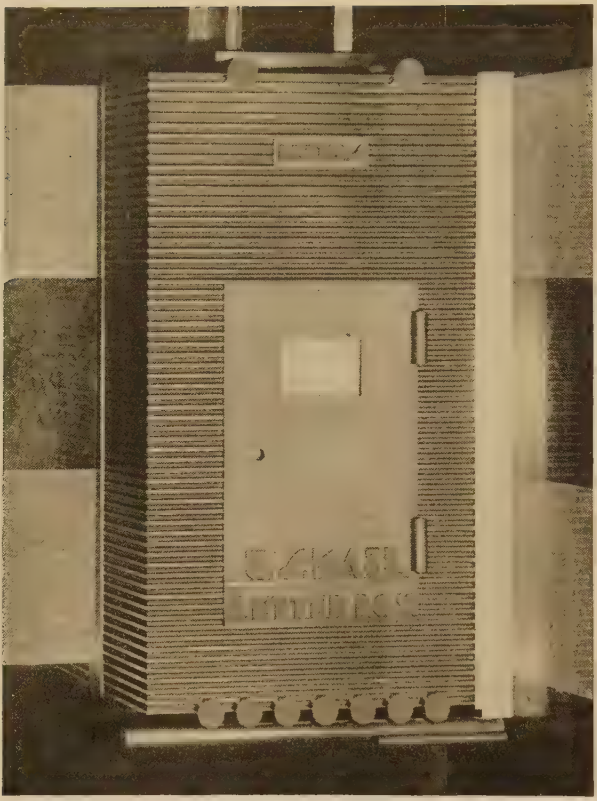

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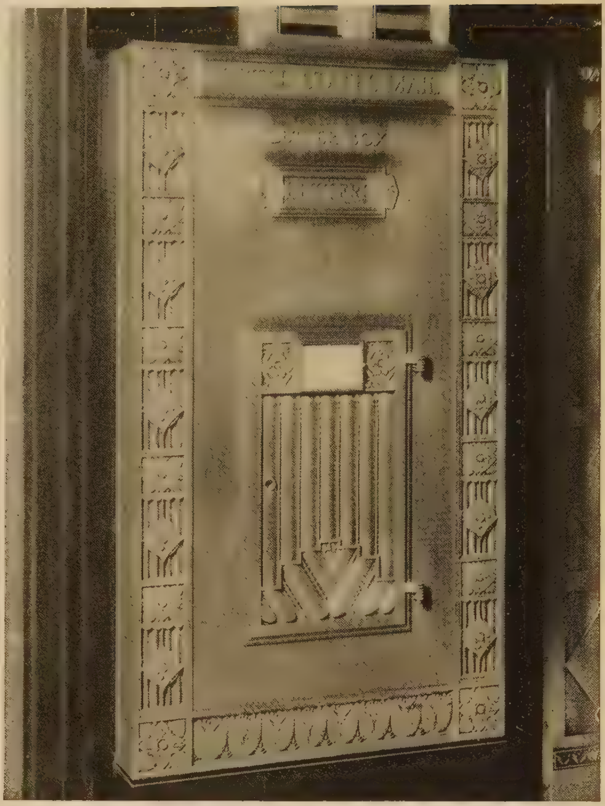
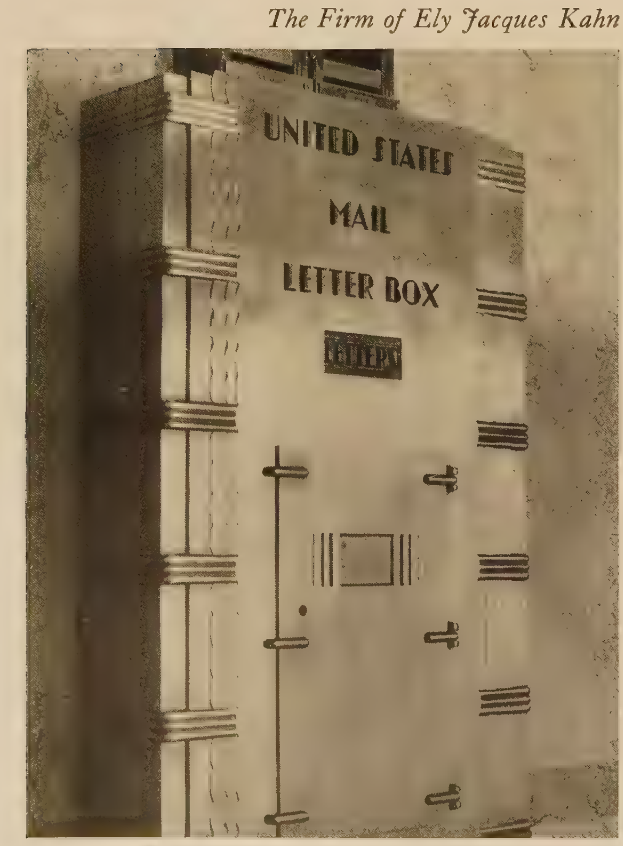


Victor Bark, Jr.

The Firm of Ely Jacques Kahn



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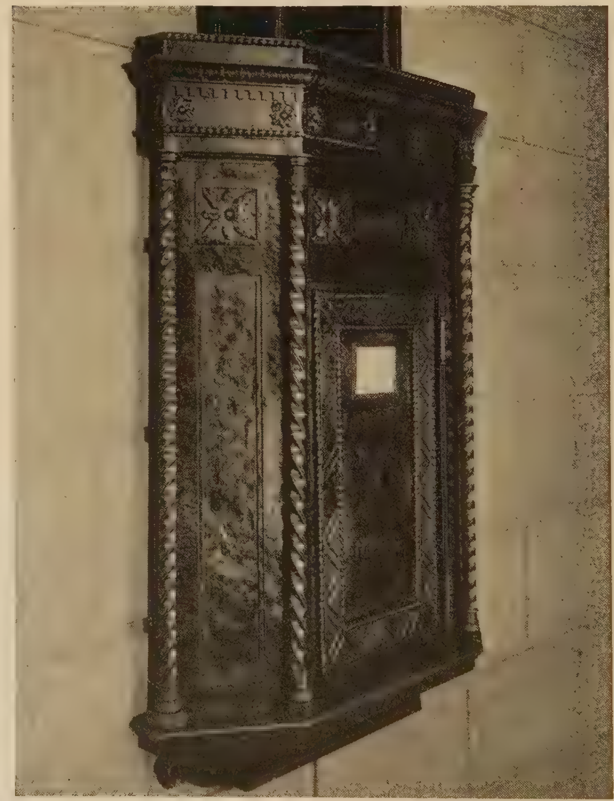

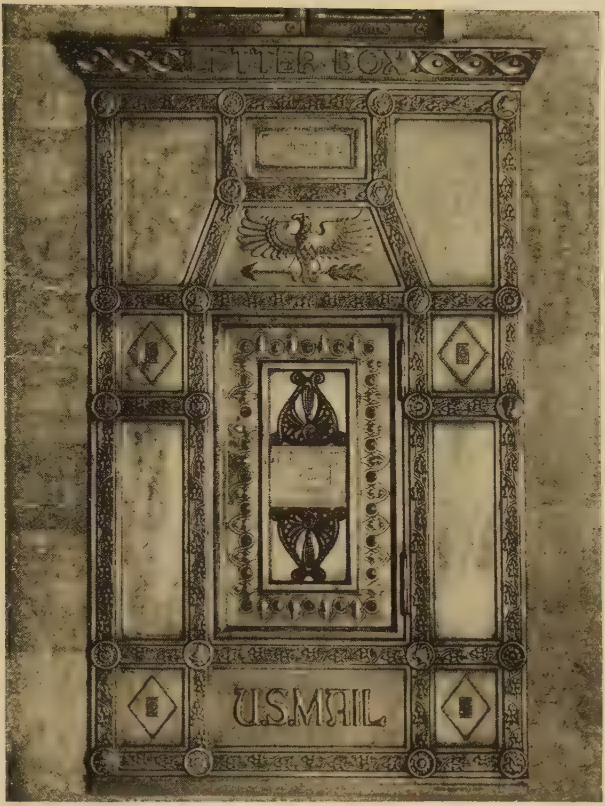

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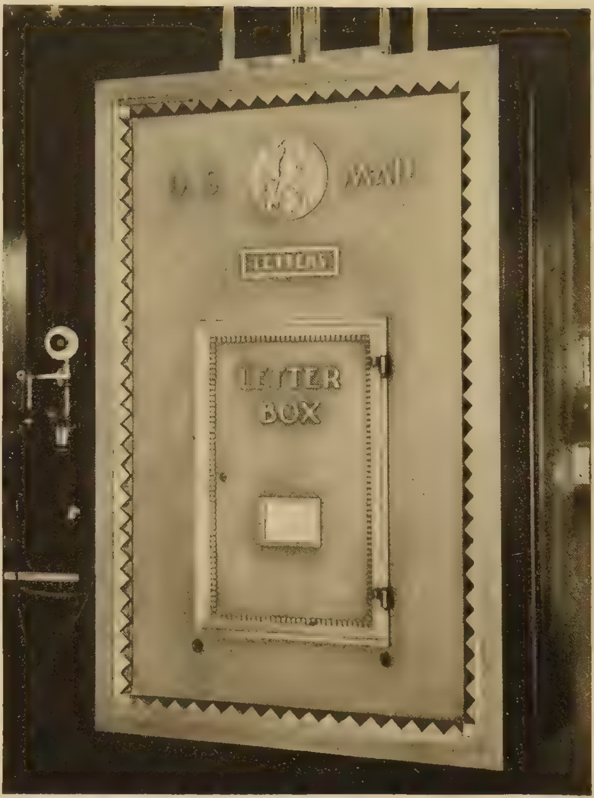
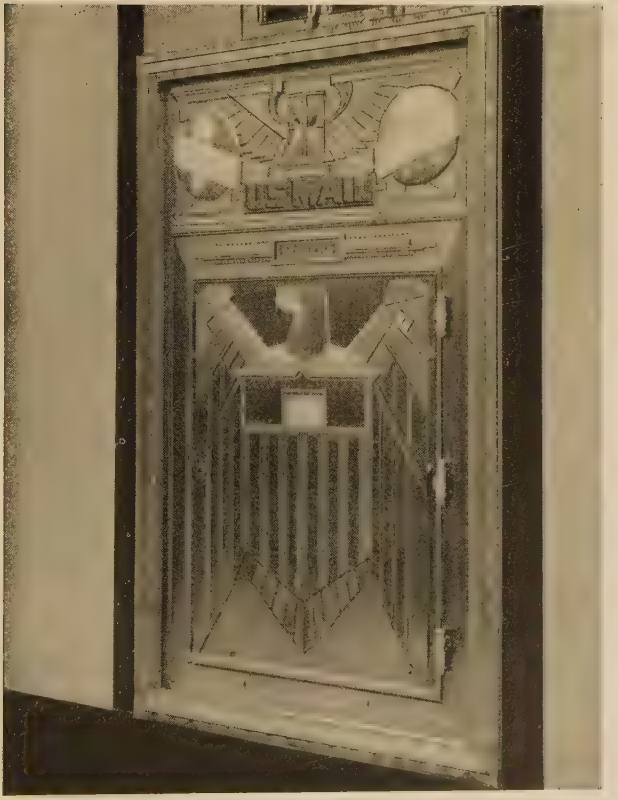


Delano & Aldrich

Walter W. Ahlschlager; Delano & Aldrich



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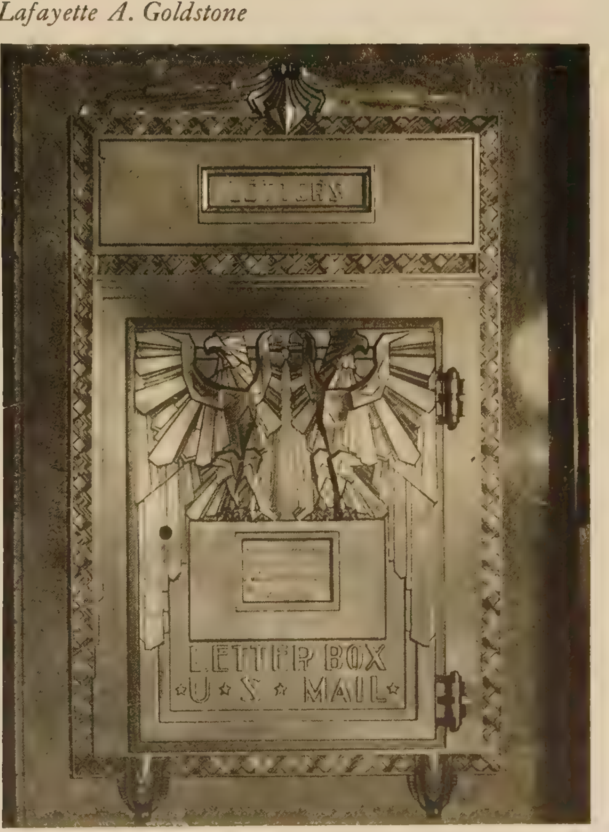

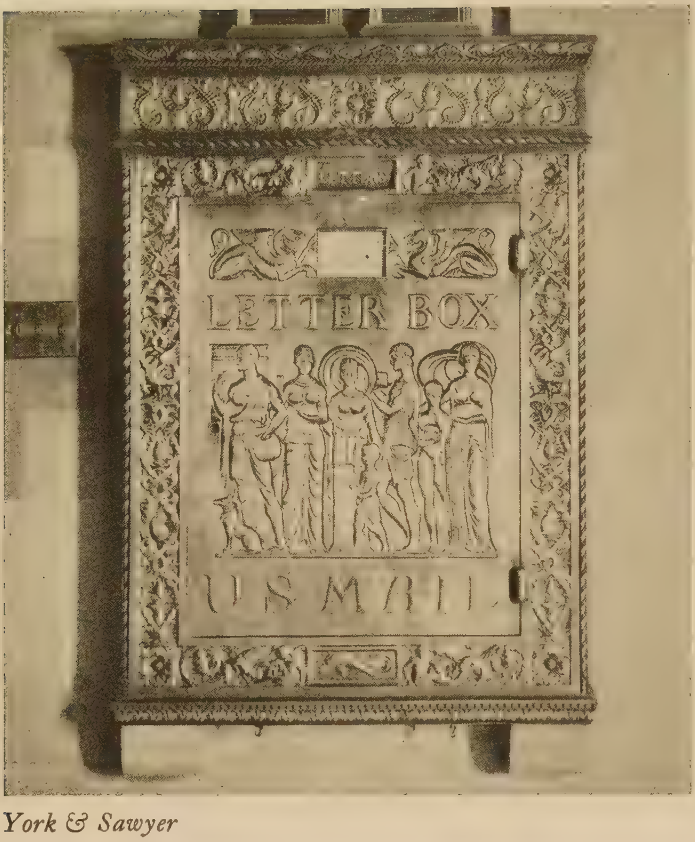

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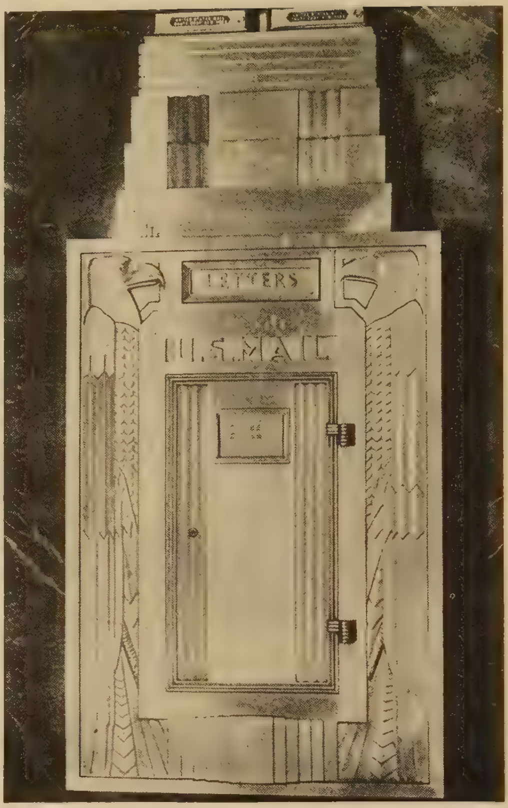

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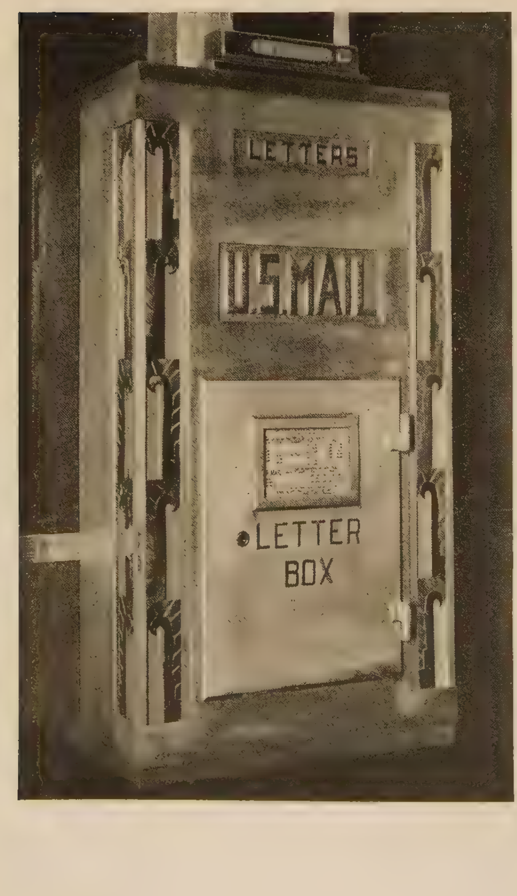
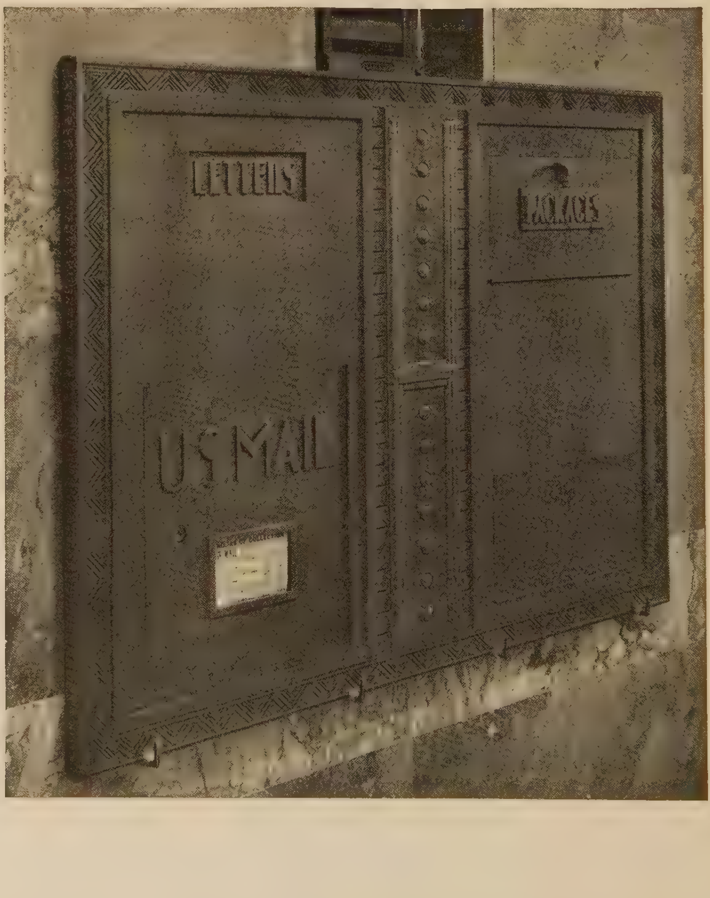


The Firm of Kenneth M. Murchison;
Raymond Hood, Godley & Fouilhoux



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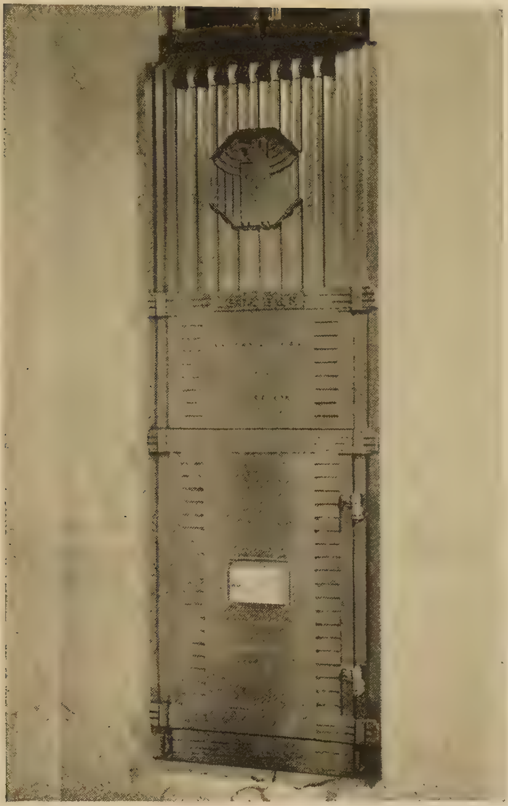
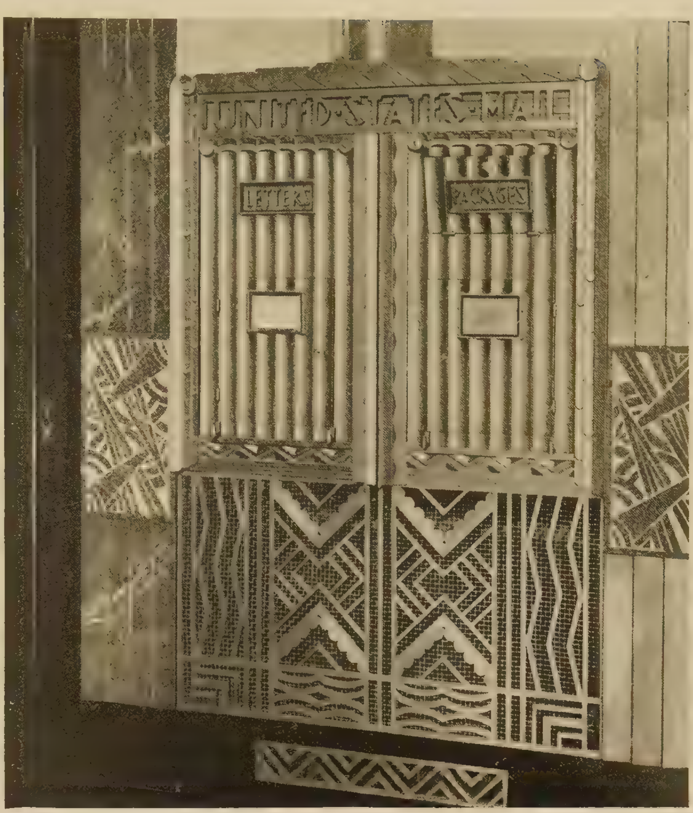
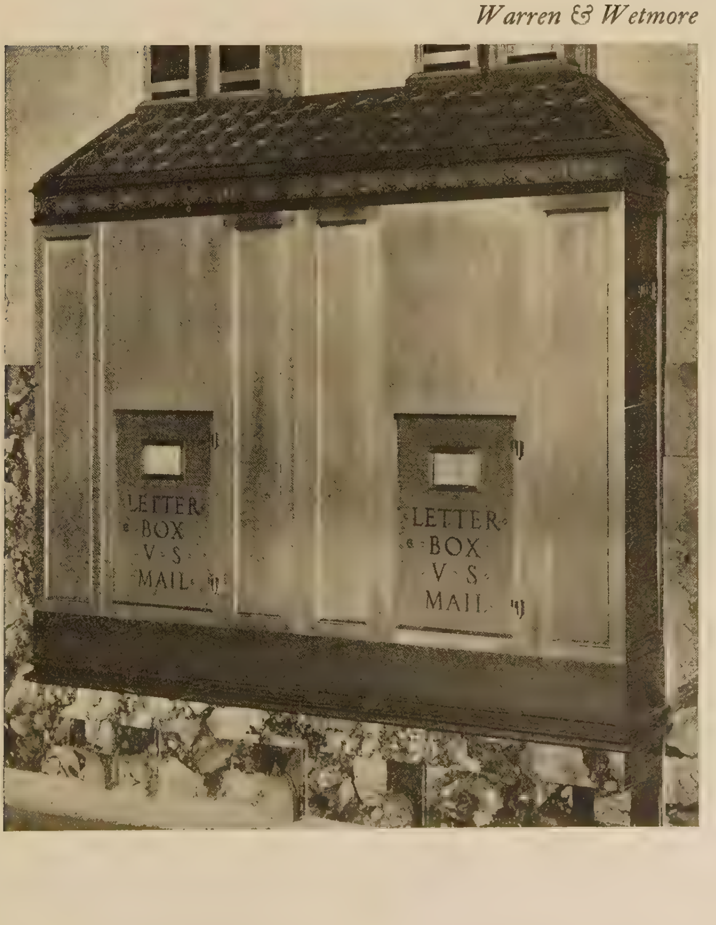


The Firm of Ely Jacques Kahn



Morgan, Walls & Clements

Warren & Wetmore



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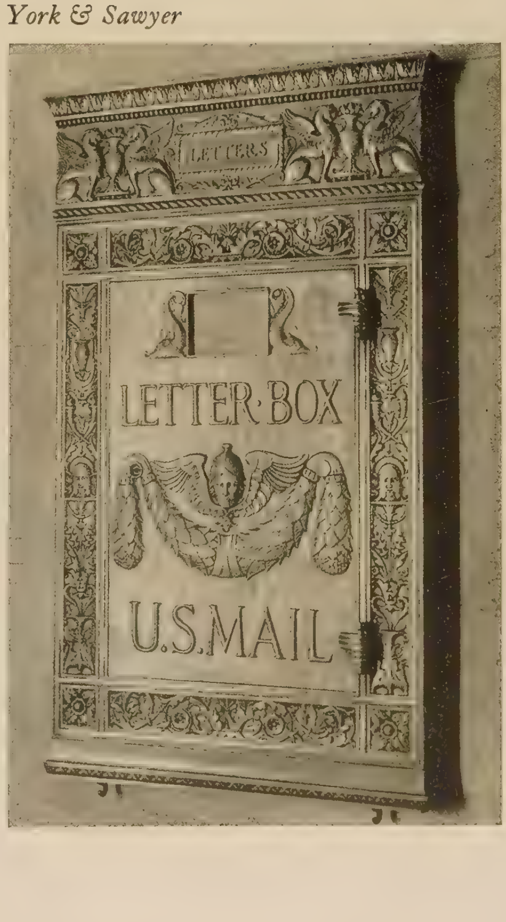

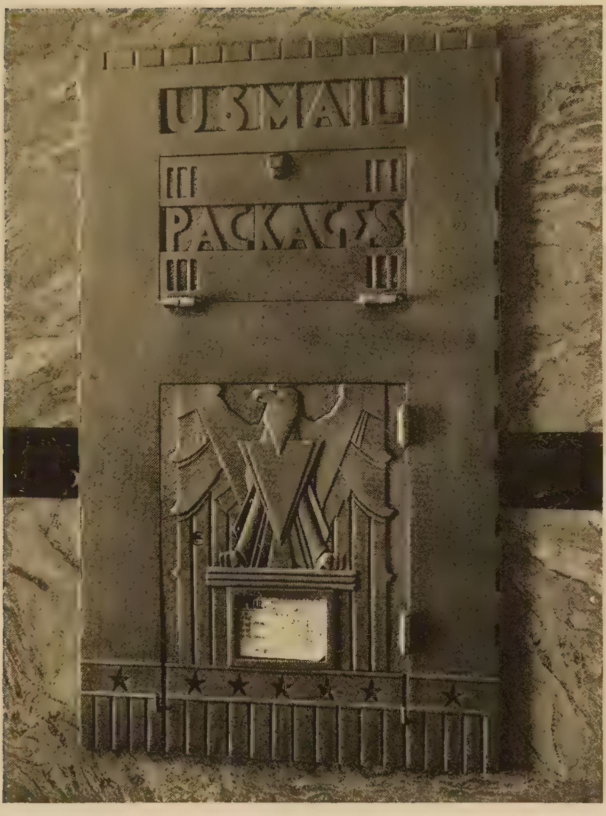

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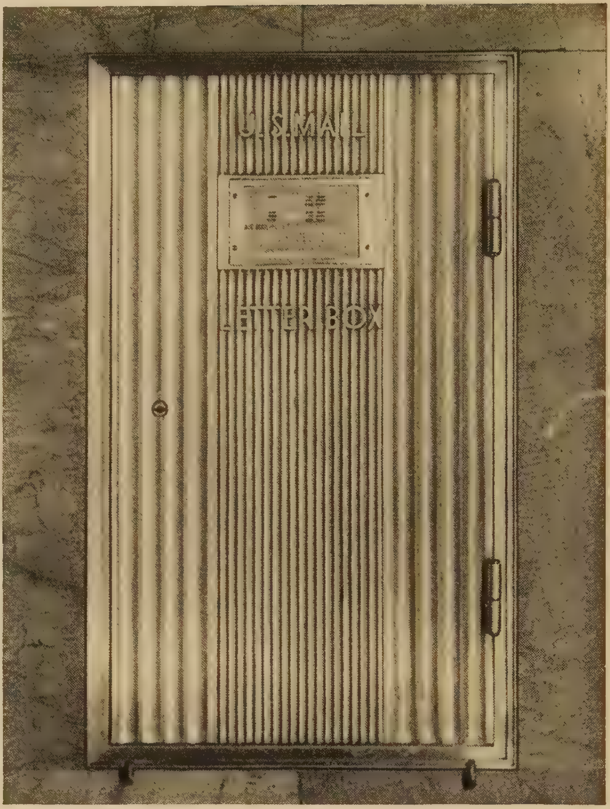
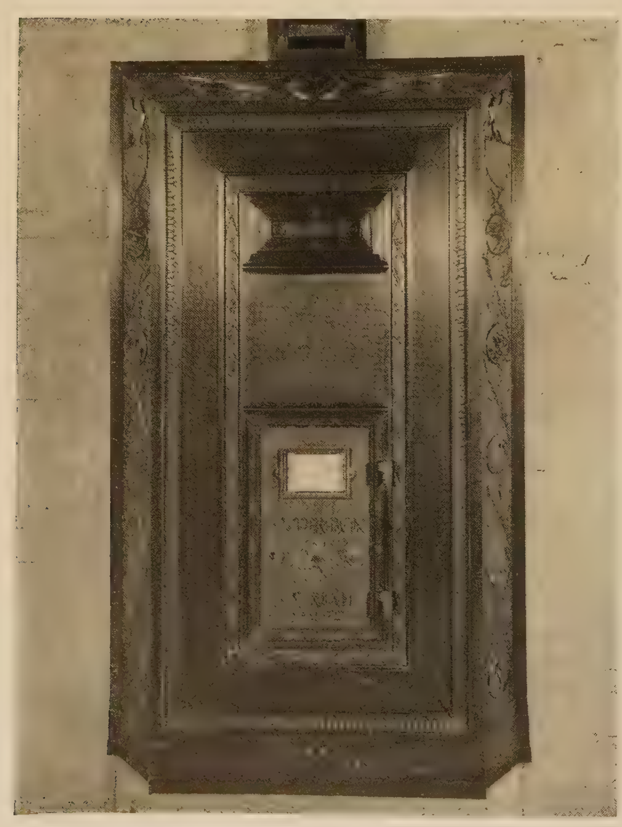


The Firm of Ely Jacques Kahn

Cass Gilbert



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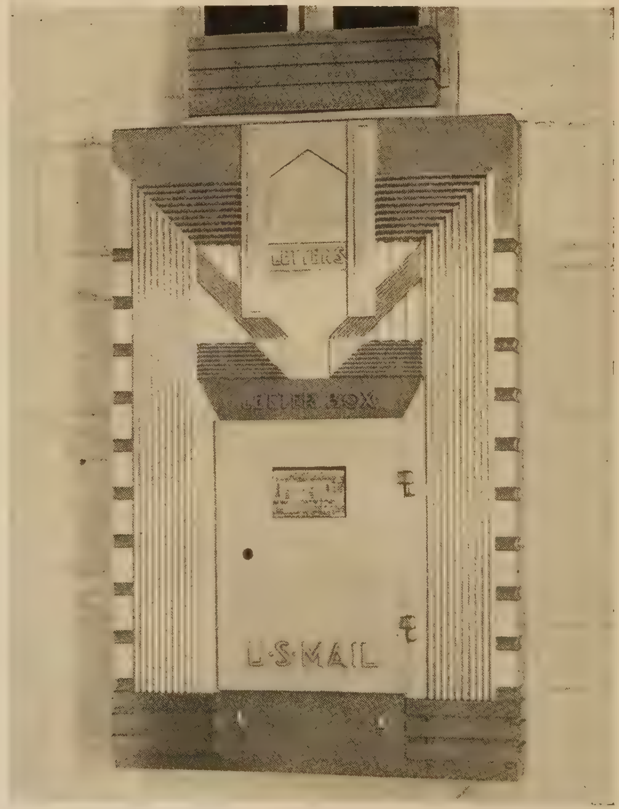

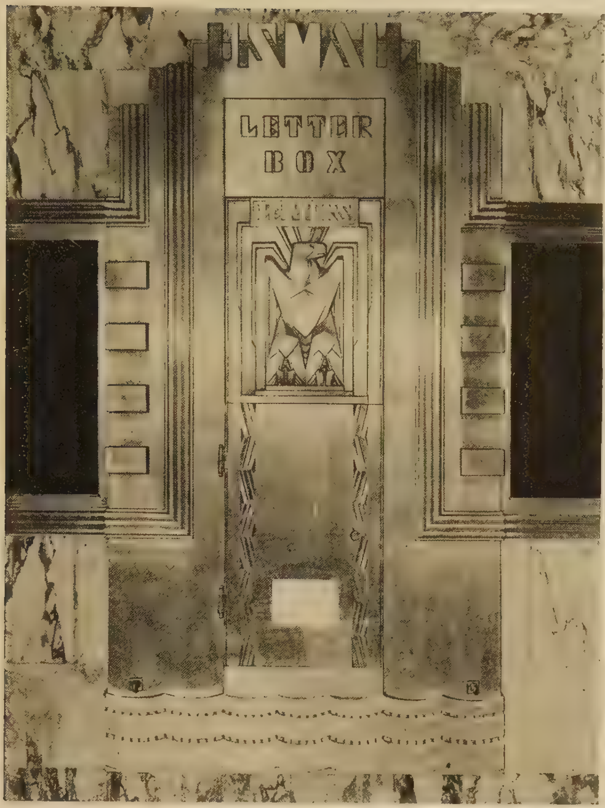

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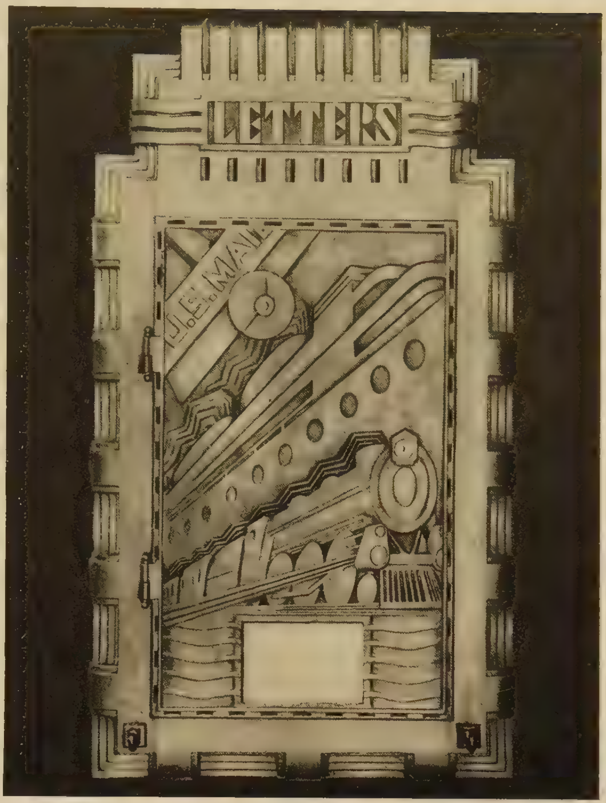

Sloan & Robertson

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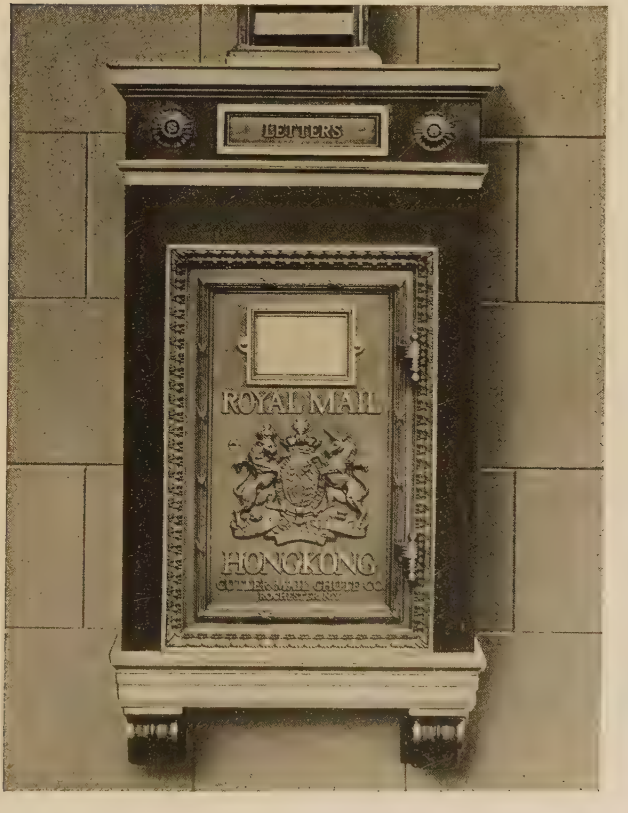

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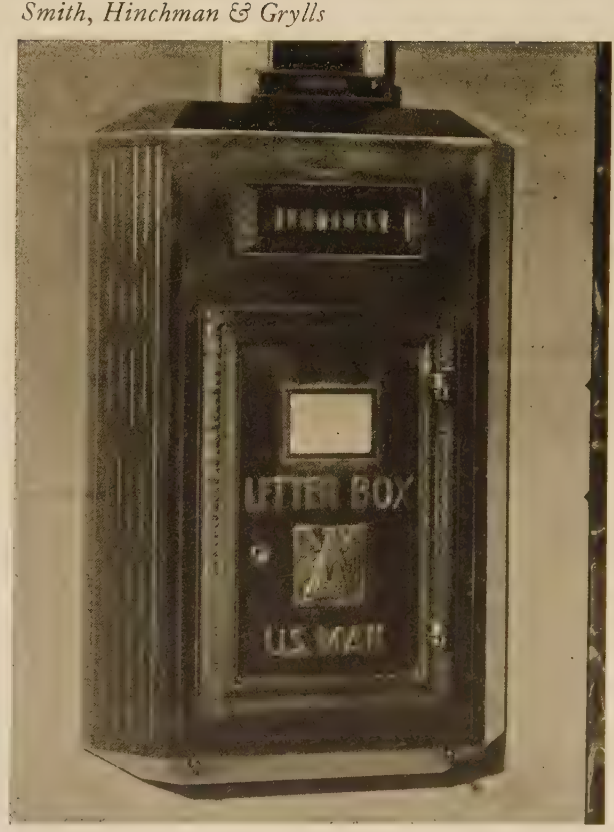

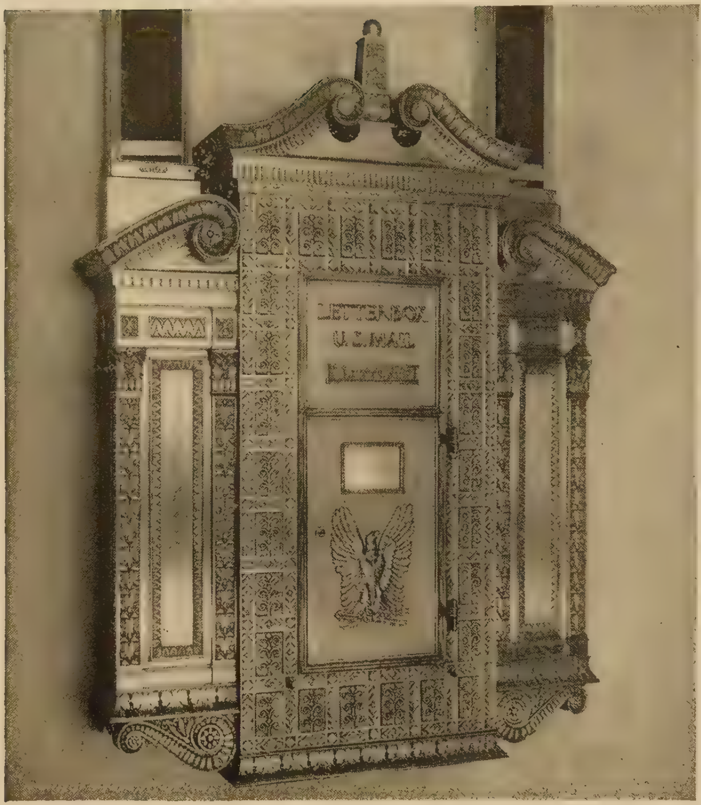

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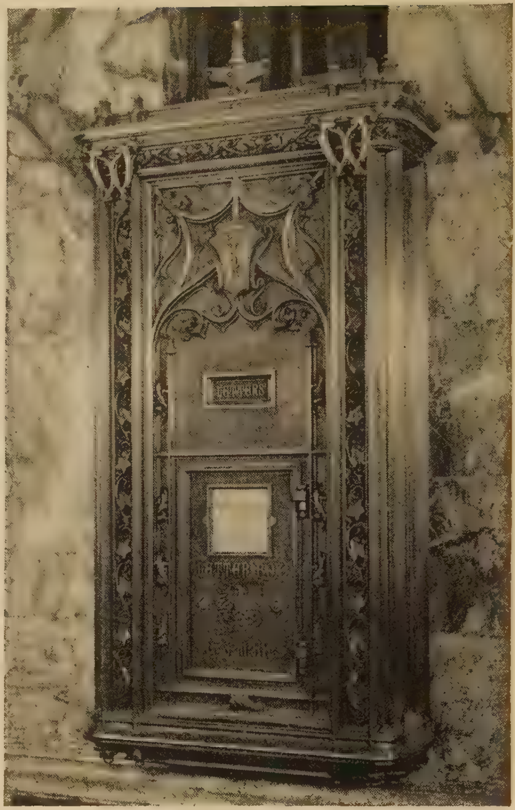
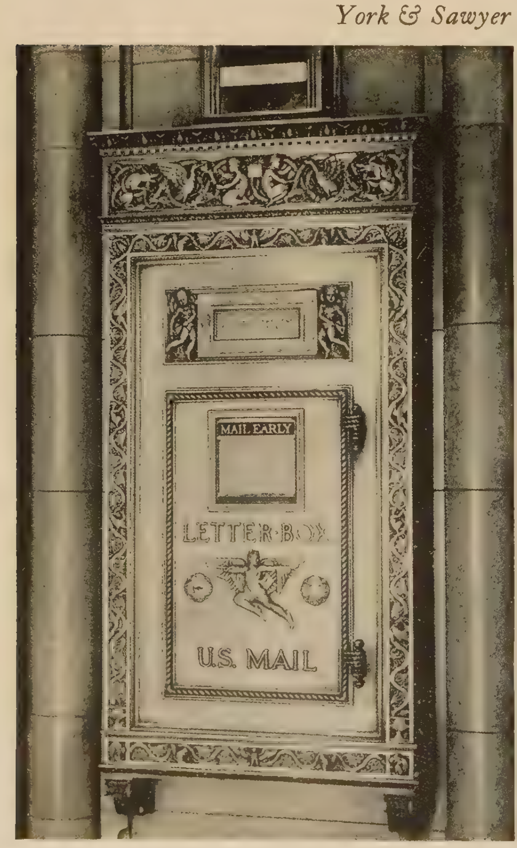


Cass Gilbert

York & Sawyer



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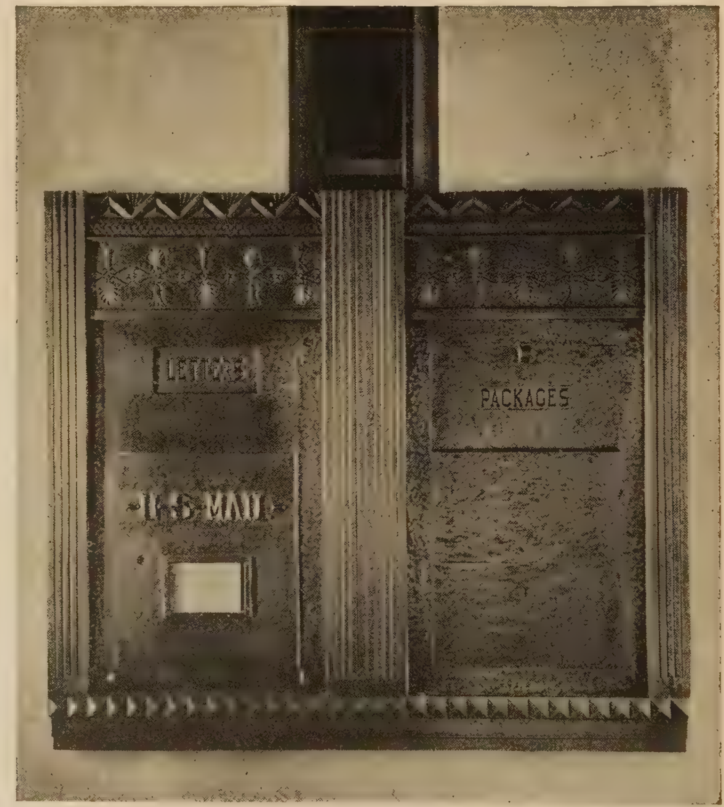
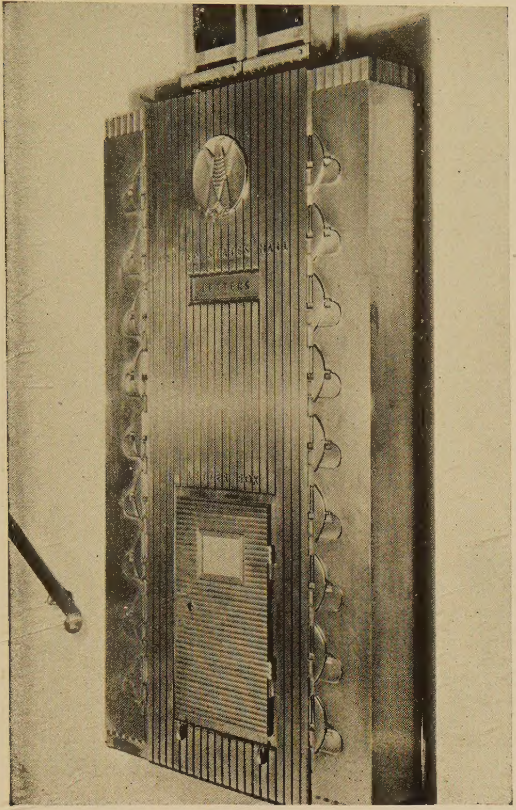
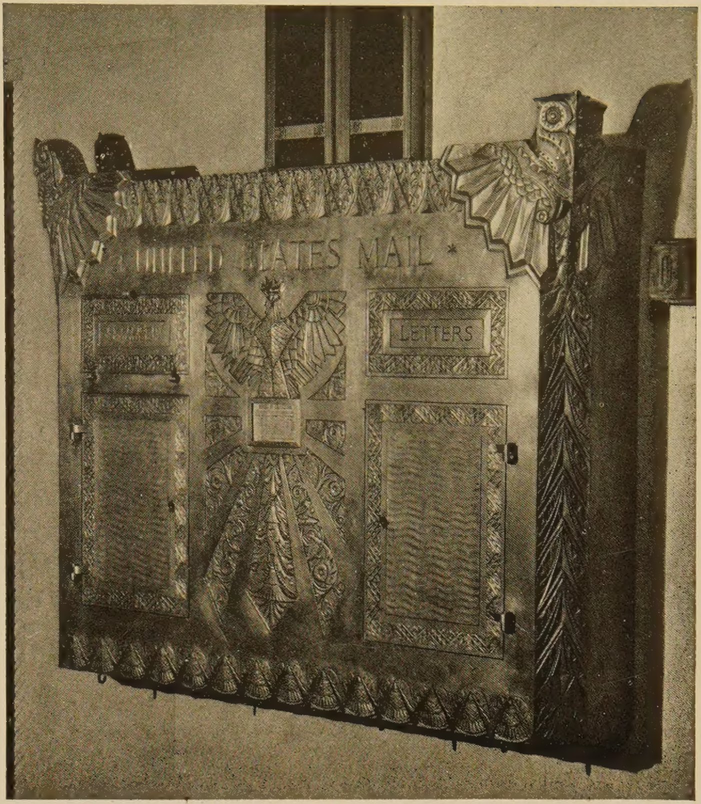


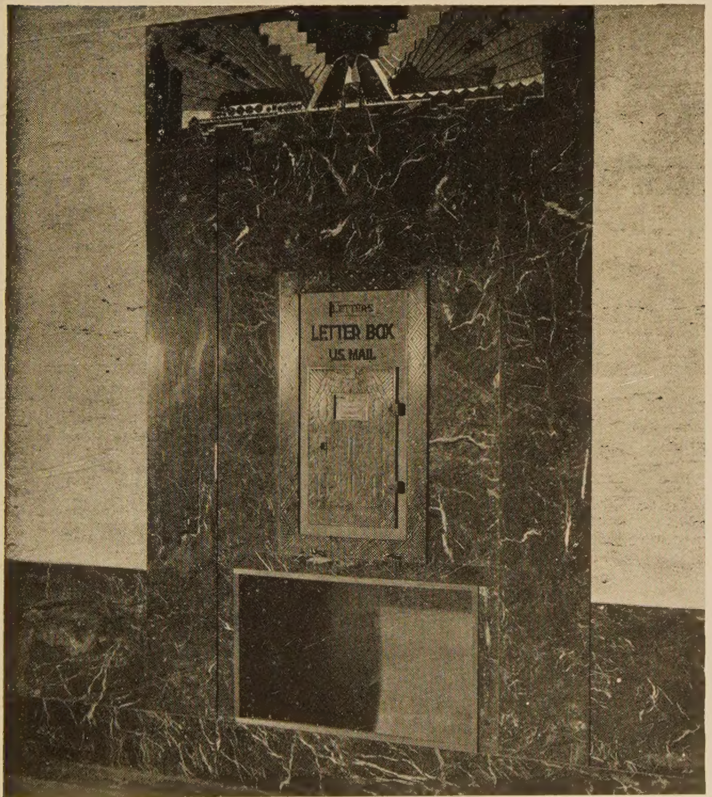


The Firm of Ely Jacques Kahn



Taylor & Fisher

Smith, Hinchman & Grylls



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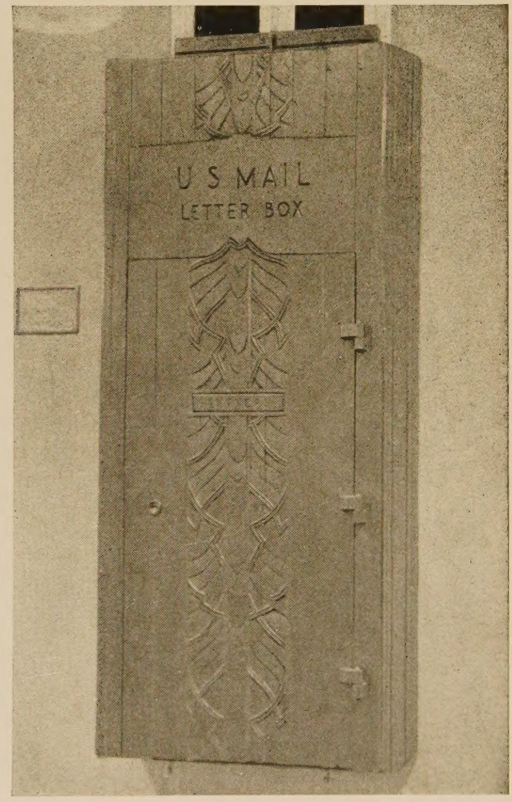
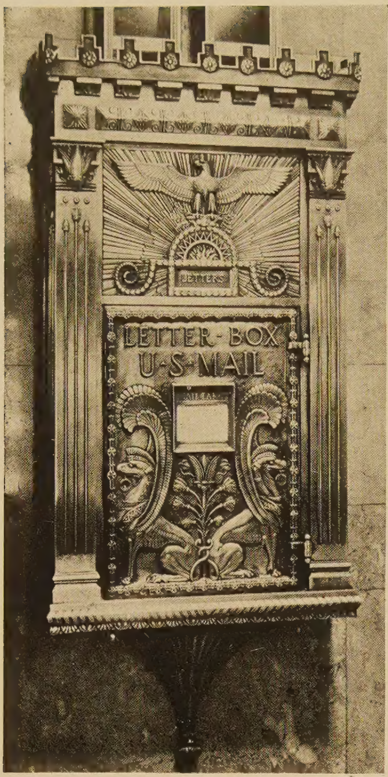
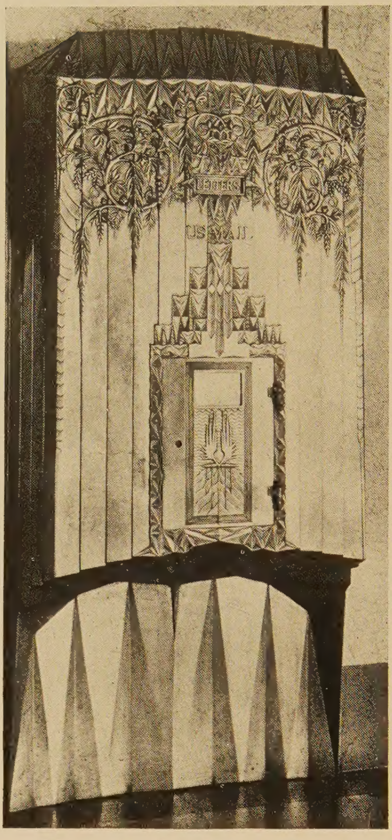




Fred F. French



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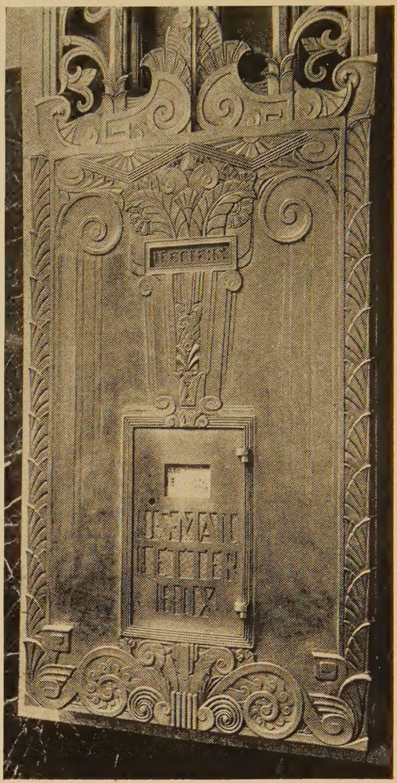

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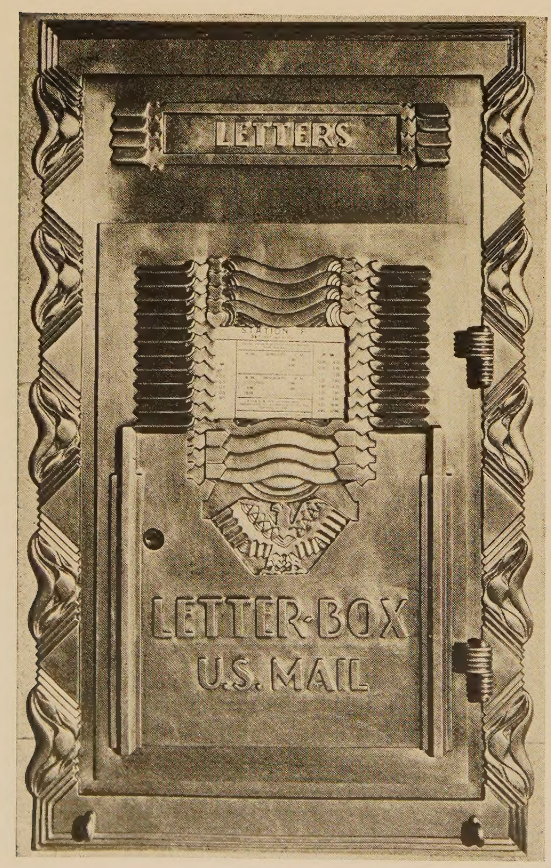

The Firm of Ely Jacques Kahn

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